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TAX EXPENDITURES

Compendium of Background Material on Individual Provisions

COMMITTEE ON THE BUDGET

UNITED STATES SENATE

DECEMBER 2008

PREPARED BY THE

CONGRESSIONAL RESEARCH SERVICE

Prepared for the use of the Committee on the Budget by the Congressional Research Service. This document has not been officially approved by the Committee and may not reflect the views of its members.

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LETTER OF TRANSMITTAL

December 30, 2008

UNITED STATES SENATE
COMMITTEE ON THE BUDGET
WASHINGTON, DC

To the Members of the Committee on the Budget:

The Congressional Budget and Impoundment and Control Act of 1974 (as amended) requires the Budget Committees to examine tax expenditures as they develop the Congressional Budget Resolution. There are over 200 separate tax expenditures in current law. Section 3(3) of the Budget Act of 1974 defines tax expenditures as those revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or provide a special credit, a preferential rate of tax, or a deferral of tax liability.

Tax expenditures are becoming increasingly important when considering the budget. They are often enacted as permanent legislation and can be compared to direct spending on entitlement programs. Both tax expenditures and entitlement spending have received, as they should in the current budget environment, increased scrutiny.

This print was prepared by the Congressional Research Service (CRS) and was coordinated by Steve Bailey and Joel Friedman of the Senate Budget Committee staff. All tax code changes through the end of the 110th Congress are included.

The CRS has produced an extraordinarily useful document which incorporates not only a description of each provision and an estimate of its revenue cost, but also a discussion of its impact, a review of its underlying rationale, an assessment which addresses the arguments for and against the provision, and a set of bibliographic references. Nothing in this print should be interpreted as representing the views or recommendations of the Senate Budget Committee or any of its members.

Kent Conrad
Chairman

LETTER OF SUBMITTAL

CONGRESSIONAL RESEARCH SERVICE
THE LIBRARY OF CONGRESS
Washington, D.C., December 23, 2008

Honorable Kent Conrad
Chairman, Committee on the Budget
U.S. Senate
Washington, DC 20510

Dear Mr. Chairman:

I am pleased to submit a revision of the December 2006 Committee Print on Tax Expenditures.

As in earlier versions, each entry includes an estimate of each tax expenditure's revenue cost, its legal authorization, a description of the tax provision and its impact, the rationale at the time of adoption, an assessment, and bibliographic citations. The impact section includes quantitative data on the distribution of tax expenditures across income classes where such data are relevant and available. The rationale section contains some detail about the historical development of each provision. The assessment section summarizes major issues surrounding each tax expenditure.

The revision was written under the general direction of Jane Gravelle, Senior Specialist in Economic Policy and Thomas Hungerford, Specialist in Public Finance. Contributors of individual entries include Andrew Austin, James Bickley, Jane Gravelle, Gary Guenther, Thomas Hungerford, Mark Keightley, Steven Maguire, Donald Marples, Nonna Noto, and Maxim Shvedov of the Government and Finance Division; Linda Levine, Robert Lyke, Christine Scott, David Smole and Scott Syzmendera of the Domestic Social Policy Division; and Salvatore Lazzari of the Resources, Science and Industry Division. Jennifer Scrafford provided editorial review and prepared the document for publication.

DANIEL P. MULHOLLAN, *Director*

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INTRODUCTION

This compendium gathers basic information concerning 186 Federal tax provisions currently treated as tax expenditures. They include those listed in Tax Expenditure Budgets prepared for fiscal years 2008-2012 by the Joint Committee on Taxation,[1] although certain separate items that are closely related and are within a major function may be combined.

With respect to each tax expenditure, this compendium provides:

The estimated Federal revenue loss associated with the provision for individual and corporate taxpayers, for fiscal years 2008-2012, as estimated by the Joint Committee on Taxation;

The legal authorization for the provision (e.g., Internal Revenue Code section, Treasury Department regulation, or Treasury ruling);

A description of the tax expenditure, including an example of its operation where this is useful;

A brief analysis of the impact of the provision, including information on the distribution of benefits where data are available;

A brief statement of the rationale for the adoption of the tax expenditure where it is known, including relevant legislative history;

An assessment, which addresses the arguments for and against the provision; and

References to selected bibliography.

---

[1]U.S. Congress, Joint Committee on Taxation. *Estimates of Federal Tax Expenditures for Fiscal Years 2008-2012*, October 31, 2008 (JCS-2-08).

The information presented for each tax expenditure is not intended to be exhaustive or definitive. Rather, it is intended to provide an introductory understanding of the nature, effect, and background of each provision. Good starting points for further research are listed in the selected bibliography following each provision.

Defining Tax Expenditures

Tax expenditures are revenue losses resulting from Federal tax provisions that grant special tax relief designed to encourage certain kinds of behavior by taxpayers or to aid taxpayers in special circumstances. These provisions may, in effect, be viewed as spending programs channeled through the tax system. They are, in fact, classified in the same functional categories as the U.S. budget.

Section 3(3) of the Congressional Budget and Impoundment Control Act of 1974 specifically defines tax expenditures as:

> . . . those revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability; . . .

In the legislative history of the Congressional Budget Act, provisions classified as tax expenditures are contrasted with those provisions which are part of the "normal structure" of the individual and corporate income tax necessary to collect government revenues.

The listing of a provision as a tax expenditure in no way implies any judgment about its desirability or effectiveness relative to other tax or non-tax provisions that provide benefits to specific classes of individuals and corporations. Rather, the listing of tax expenditures, taken in conjunction with the listing of direct spending programs, is intended to allow Congress to scrutinize all Federal programs relating to the same goals — both non-tax and tax — when developing its annual budget. Only when tax expenditures are considered will congressional budget decisions take into account the full spectrum of Federal programs.

Because any qualified taxpayer may reduce tax liability through use of a tax expenditure, such provisions are comparable to entitlement programs under which benefits are paid to all eligible persons. Since tax expenditures are generally enacted as permanent legislation, it is important that, as

entitlement programs, they be given thorough periodic consideration to see whether they are efficiently meeting the national needs and goals for which they were established.

Tax expenditure budgets which list the estimated annual revenue losses associated with each tax expenditure first were required to be published in 1975 as part of the Administration budget for fiscal year 1976, and have been required to be published by the Budget Committees since 1976. The tax expenditure concept is still being refined, and therefore the classification of certain provisions as tax expenditures continues to be discussed. Nevertheless, there has been widespread agreement for the treatment as tax expenditures of most of the provisions included in this compendium.[2]

As defined in the Congressional Budget Act, the concept of tax expenditure refers to the corporate and individual income taxes. Other parts of the Internal Revenue Code — excise taxes, employment taxes, estate and gift taxes — also have exceptions, exclusions, refunds and credits (such as a gasoline tax exemptions for non-highway uses) which are not included here because they are not parts of the income tax.

The Joint Committee on Taxation Pamphlet on Tax Expenditure Analysis

The need for analysis of tax expenditures has long been recognized. Walter Blum in a 1955 Joint Economic Committee report stated that tax expenditures are "hidden in technicalities of the tax law; they do not show up in the budget; their cost frequently is difficult to calculate; and their accomplishments are even more difficult to assess."[3] As a result of this lack

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[2]For a discussion of the conceptual problems involved in defining tax expenditures and some of the differences between the Administration and Joint Committee approaches, see *The Budget of the United States Government, Fiscal Year 2009, Analytical Perspectives*, "Tax Expenditures," pp. 285-325. See also Linda Sugin, "What is Happening to the Tax Expenditure Budget?" *Tax Notes*, August 16, 2004, pp. 763-766, Thomas L. Hungerford, *Tax Expenditures: Trends and Critiques*, Library of Congress, Congressional Research Service Report RL33641, September 13, 2006, and Thomas L. Hungerford, "Tax Expenditures: Good, Bad, or Ugly?" *Tax Notes*, October 23, 2006, pp. 325-334.

[3]Walter J. Blum, "The Effects of Special Provisions in the Income Tax on Taxpayer Morale," in U.S. Congress, Joint Economic Committee, *Federal Tax*

(continued...)

of transparency, analysts argue that tax expenditure analysis is a critical tool in achieving a more accountable process for enacting and tracking government programs.[4] In May 2008, the Joint Committee on Taxation (JCT) released a pamphlet justifying the need to reconsider their implementation of tax expenditure analysis.[5]

The JCT acknowledges the criticisms of the use of a normal tax system and sets out to modify tax expenditure analysis so it will serve as an "effective and neutral analytical tool for policymakers."[6] Their approach is to revise the classification of tax expenditures without reference to the normal tax system. The revised classification creates two broad categories of tax expenditures: tax subsidies and tax-induced structural distortions.[7]

Tax subsidies are tax provisions that are "deliberately inconsistent with an identifiable general rule of the present tax law."[8] Tax subsidies are further divided into three subcategories. The first is tax transfers, which are transfers to taxpayers regardless of their tax liability and would include the refundable portions of various tax credits (for example, the earned income credit (EIC) and the child tax credit). The second subcategory is social spending, which is designed to induce behaviors unconnected to the production of business income. Examples would include the charitable giving deduction, deductions and exclusions for individual retirement accounts (IRAs), and the nonrefundable portions of the EIC and child tax credit. The final subcategory is business synthetic spending, which includes

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[3](...continued)
Policy for Economic Growth and Stability, report, 84th Cong., 1st sess. (Washington, DC: GPO, 1955), 251-252.

[4]See, for example, J. Clifton Fleming and Robert J. Peroni, "Reinvigorating Tax Expenditure Analysis and its International Dimension," *Virginia Tax Review*, vol. 27, no. 3 (Winter 2008), pp. 437-562.

[5]Joint Committee on Taxation, *A Reconsideration of Tax Expenditure Analysis*, May 12, 2008 (JCX-37-08), hereafter referred to as *Reconsideration*.

[6]*Reconsideration*, p. 7.

[7]The JCT also proposes to have a third category that includes tax expenditures as defined under their current methodology but don't fit into either of these two categories.

[8]*Reconsideration*, p. 9.

subsidies designed to induce behaviors directly related to the production of business income (for example, various energy tax subsidies).

Tax-induced structural distortions contain the elements of the tax code that "materially affect economic decisions in a manner that imposes substantial economic efficiency costs."[9] An example of this category of tax expenditure is the differential taxation of debt and equity financing. Since interest is a deductible business expense, corporations may be encouraged to raise capital as debt rather than equity.

The most recent JCT tax expenditure list includes many more items than on previous lists. Part of the explanation is JCT decided to split out items that had formerly been combined. In addition, several new tax expenditure items have been added, which had not been considered tax expenditures in past years. Many of the new items are negative tax expenditures.

The tax expenditure items in this compendium are listed by budget function categories as in previous compendiums. In many instances, we combine two or more tax expenditures into a single item. Furthermore, we include the five items that the most recent JCT document no longer classifies as tax expenditures that they have traditionally listed as tax expenditures.

Administration Fiscal Year 2009 Expenditure Budget

There are several differences between the tax expenditures shown in this publication and the tax expenditure budget found in the Administration's FY2009 budget document. In some cases tax expenditures are combined in one list, but not in the other.

Major Types of Tax Expenditures

Tax expenditures may take any of the following forms:

(1) exclusions, exemptions, and deductions, which reduce taxable income;

(2) preferential tax rates, which apply lower rates to part or all of a taxpayer's income;

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[9] *Reconsideration*, p. 10.

(3) credits, which are subtracted from taxes as ordinarily computed; and

(4) deferrals of tax, which result from delayed recognition of income or from allowing in the current year deductions that are properly attributable to a future year.

The amount of tax relief per dollar of each exclusion, exemption, and deduction increases with the taxpayer's tax rate. A tax credit is subtracted directly from the tax liability that would otherwise be due; thus the amount of tax reduction is the amount of the credit — which does not depend on the marginal tax rate. (See Appendix A for further explanation.)

Largest Tax Expenditures

While JCT lists and estimates 247 items in their tax expenditure publication, relatively few account for most of the aggregate cost. The following two tables list the top individual and corporate tax expenditures. The first table lists the 10 largest tax expenditures directed to individuals. In several instances, one item in the table includes two or more items listed by JCT. For example, JCT includes an item for the refundable portion of the earned income tax credit and another for the nonrefundable portion. We combine these two items into one. The 10 items listed here account for 21 separate items in JCT's list. Overall, these 10 items account for 70 percent of the total dollars of tax expenditures directed to individuals.

10 Largest Tax Expenditures, 2008: Individuals
[In billions of dollars]

Tax Expenditure	Amount
Reduced rates of tax on dividends and long-term capital gains	150.2
Exclusion of contributions and earnings to retirement plans	119.2
Exclusion of employer contributions for health care	116.8
Recovery rebate	95.0
Deduction for mortgage interest	67.0
Earned income tax credit	48.6
Deduction of State and local taxes	48.0
Tax credit for children under age 17	47.6
Deduction for charitable contributions	44.3
Exclusion of Medicare benefits	41.0

The next table reports the 10 largest tax expenditures directed to corporations. Again, some of the JCT tax expenditure items have been combined into a single item. Overall, these 10 tax expenditure items account for about 70 percent of the total dollars of tax expenditures directed to corporations. The two largest items in the table are no longer classified as tax expenditures by JCT.

10 Largest Tax Expenditures, 2008: Corporations
[In billions of dollars]

Tax Expenditure	Amount
Depreciation of equipment in excess of the alternative depreciation system	32.6
Deferral for active income of controlled foreign corporations	9.6
Exclusion of interest on public purpose State and local government bonds	7.4
Inventory property sales source exception	6.8
Inventory methods and valuation	5.7
Deduction of income attributable to domestic production activities	5.5
Credit for increasing research activities	4.9
Credit for low-income housing	4.8
Reduced rates on first $10 million of corporate taxable income	3.3
Expensing of research and experimental expenditures	3.1

Order of Presentation

The tax expenditures are presented in an order which generally parallels the budget functional categories used in the congressional budget, *i.e.*, tax expenditures related to "national defense" are listed first, and those related to "international affairs" are listed next. In a few instances, two or three closely related tax expenditures derived from the same Internal Revenue Code provision have been combined in a single summary to avoid repetitive references even though the tax expenditures are related to different functional categories. This parallel format is consistent with the requirement of section 301(d)(6) of the Budget Act, which requires the tax expenditure budgets published by the Budget Committees as parts of their April 15 reports to present the estimated levels of tax expenditures "by major functional categories."

Impact (Including Distribution)

The impact section includes information on the direct effect of the provisions and, where available, the distributional effect across individuals. Unless otherwise specified, distributional tables showing the share of the tax expenditure received by income class are calculated from data in the Joint Committee on Taxation's committee print on tax expenditures for 2008-2012. This distribution uses an expanded income concept that is composed of adjusted gross income (AGI), plus (1) tax-exempt interest, (2) employer contributions for health plans and life insurance, (3) employee share of FICA tax, (4) worker's compensation, (5) nontaxable Social Security benefits, (6) insurance value of Medicare benefits, (7) corporate income tax liability passed on to shareholders, (8) alternative minimum tax preferences, and (9) excluded income of U.S. citizens abroad.

These estimates were made for 12 tax expenditures. For other tax expenditures, a distributional estimate or information on distributional impact is provided, when such information could be obtained.

The following table shows the estimated distribution of returns by income class, for comparison with those tax expenditure distributions:

Distribution by Income Class of Tax Returns at 2007 Income Levels

Income Class (in thousands of $)	Percentage Distribution
Below $10	18.2
$10 to $20	14.4
$20 to $30	10.7
$30 to $40	9.4
$40 to $50	8.1
$50 to $75	14.2
$75 to $100	9.0
$100 to $200	12.4
$200 and over	3.6

The Tax Policy Center has simulated the effect across the income distribution of eliminating tax expenditures;[10] their results are reproduced in

[10]Leonard E. Burman, Christopher Geissler, and Eric J. Toder, "How Big Are Total Individual Income Tax Expenditures, and Who Benefits from Them?"

(continued...)

the table below. The table shows the percentage decrease in after-tax income from eliminating tax expenditures by income quintile. Overall, tax expenditures tend to benefit higher income taxpayers — they have an "upside down" distributional pattern. The distribution pattern, however, differs by the type of tax expenditure. Exclusions, preferential tax rates on capital gains and dividends, and itemized deductions benefit higher income taxpayers, while refundable tax credits benefit lower income taxpayers.

Tax Expenditures as a Percentage of After-Tax Income, 2007

Type	Poorest Quintile	Middle Quintile	Richest Quintile	Top 1 Percent
Exclusions	0.5	3.8	4.7	2.9
Above-line deductions	0.0	0.1	0.1	0.1
Capital gains, dividends	0.0	0.0	2.1	5.9
Itemized deductions	0.0	0.4	2.9	3.2
Nonrefund credits	0.1	0.3	0.1	0.0
Refund credits	5.5	2.2	0.3	0.0
All	6.5	6.8	11.4	13.5

Source: Burman, Geissler, and Toder.

Many tax expenditures are corporate and thus do not directly affect the taxes of individuals. Most analyses of capital income taxation suggest that such taxes are likely to be borne by capital given reasonable behavioral assumptions.[11] Capital income is heavily concentrated in the upper-income levels. For example, the Congressional Budget Office[12] reports in 2005 that

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[10](...continued)
American Economic Review, papers and proceedings, v. 98, no. 2, May 2008, pp. 79-83.

[11]See Jane G. Gravelle and Thomas L. Hungerford, *Corporate Tax Reform: Issues for Congress*, Library of Congress, Congressional Research Service Report RL34229, July 24, 2008.

[12]U.S. Congress, Congressional Budget Office. *Effective Federal Tax Rates for*
(continued...)

the top 1 percent of taxpayers accounted for 59 percent of capital income the top 5 percent accounted for 75 percent, the top 10 percent accounted for 82 percent, and the top 20 percent accounted for 88 percent. The distribution of corporate income liabilities across the first four quintiles was less than 1 percent, 1 percent, 3 percent, and 6 percent. Corporate tax expenditures would, therefore, tend to benefit higher-income individuals.

Rationale

Each tax expenditure item contains a brief statement of the rationale for the adoption of the expenditure, where it is known. They are the principal rationales publicly given at the time the provisions were enacted. The rationale also chronicles subsequent major changes in the provisions and the reasons for the changes.

Assessment

The assessment section summarizes the arguments for and against the tax expenditures and the issues they raise. These issues include effects on economic efficiency, on fairness and equity, and on simplicity and tax administration. Further information can be found in the bibliographic citations.

Estimating Tax Expenditures

The revenue losses for all the listed tax expenditures are those estimated by the Joint Committee on Taxation.

In calculating the revenue loss from each tax expenditure, it is assumed that only the provision in question is deleted and that all other aspects of the tax system remain the same. In using the tax expenditure estimates, several points should be noted.

First, in some cases, if two or more items were eliminated, the combination of changes would probably produce a lesser or greater revenue effect than the sum of the amounts shown for the individual items. Thus, the

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(...continued)
1979-2005, December 2007, Table 1B.

arithmetical sum of all tax expenditures (reported below) may be different from the actual revenue consequences of eliminating all tax expenditures.[13]

Second, the amounts shown for the various tax expenditure items do not take into account any effects that the removal of one or more of the items might have on investment and consumption patterns or on any other aspects of individual taxpayer behavior, general economic activity, or decisions regarding other Federal budget outlays or receipts.

Finally, the revenue effect of new tax expenditure items added to the tax law may not be fully felt for several years. As a result, the eventual annual cost of some provisions is not fully reflected until some time after enactment. Similarly, if items now in the law were eliminated, it is unlikely that the full revenue effects would be immediately realized.

These tax expenditure estimating considerations are, in many ways, similar to estimating considerations involving entitlement programs. First, like tax expenditures, annual budget estimates for each transfer and income-security program are computed separately. However, if one program, such as veterans pensions, were either terminated or increased, this would affect the level of payments under other programs, such as welfare payments. Second, like tax expenditure estimates, the elimination or curtailment of a spending program, such as military spending or unemployment benefits, would have substantial effects on consumption patterns and economic activity that would directly affect the levels of other spending programs. Finally, like tax expenditures, the budgetary effect of terminating certain entitlement programs would not be fully reflected until several years later because the termination of benefits is usually only for new recipients, with persons already receiving benefits continued under "grandfather" provisions.

All revenue loss estimates are based upon the tax law enacted through the end of the 110th Congress. The table below shows tax expenditure estimates by year for individuals and corporations.

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[13] A recent study estimates that the sum of revenues lost under the separate tax expenditures is about 8 percent less than the revenue loss when the tax expenditures are taken as a group. See Burman, Geissler, and Toder.

Sum of Tax Expenditure Estimates by Type of Taxpayer, Fiscal Years 2008-2012

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1,104.6	118.1	1,222.7
2009	1,047.3	117.0	1,164.3
2010	1,060.6	99.4	1,160.0
2011	1,106.0	105.9	1,211.9
2012	1,166.2	116.0	1,282.2

Note: These totals are the mathematical sum of the estimated fiscal year effect of each of the tax expenditure items included in this publication as appearing in the Joint Committee on Taxation's 2008 list.

Selected Bibliography

Altshuler, Rosanne and Robert D. Dietz. *Reconsidering Tax Expenditure Estimation: Challenges and Reform*, paper presented at NBER conference, March 27-29, 2008.

Bartlett, Bruce. "The Flawed Concept of Tax Expenditures." National Center for Policy Analysis (http:/www.ncpa.org).

Bosworth, Barry P. *Tax Incentives and Economic Growth*. Washington, DC: The Brookings Institution, 1984.

Brannon, Gerard M. "Tax Expenditures and Income Distribution: A Theoretical Analysis of the Upside-Down Subsidy Argument," *The Economics of Taxation*, ed. Henry J. Aaron and Michael J. Boskin. Washington, DC: The Brookings Institution, 1980, pp. 87-98.

Brixi, Hana Polackova, Christian M.A. Valenduc and Zhicheng Li Swift. *Shedding Light on Government Spending Through the Tax System: Lessons from Developed and Transition Economies.* Washington, DC, the World Bank, 2004.

Browning, Jacqueline, M. "Estimating the Welfare Cost of Tax Preferences," *Public Finance Quarterly*, v. 7, no. 2. April 1979, pp. 199-219.

Burman, Leonard E. "Is the Tax Expenditure Concept Still Relevant?" *National Tax Journal,* v. 56 September 2003, pp. 613-628.

Burman, Leonard, Christopher Geissler, and Eric J. Toder. "How Big Are Total Individual Income Tax Expenditures, and Who Benefits from Them?" *American Economic Review, papers and proceedings*, v. 98, no. 2, May 2008, pp. 79-83.

The Century Foundation, *Bad Breaks All Around*, Report of the Working Group on Tax Expenditures, New York: The Century Foundation Press, 2002.

Craig, Jon and William Allan. "Fiscal Transparency, Tax Expenditures and Budget Processes: An International Perspective," *Proceedings of the 94th Annual Conference 2001*, Washington, D.C.: National Tax Association, 2002, 258-264.

Edwards, Kimberly K. "Reporting for Tax Expenditure and Tax Abatement," *Government Finance Review*, v. 4. August 1988, pp. 13-17.

Freeman, Roger A. *Tax Loopholes: The Legend and the Reality*. Washington, DC: American Enterprise Institute for Public Policy Research, 1973.

Fox, John O. "The Untold Story: Congress's Own Calculation of Its Revenue Losses from Special Provisions of the Tax Laws." Chapter 5 in *If Americans Really Understood the Income Tax*. Boulder, Colorado: Westview Press, 2001.

Goode, Richard. *The Individual Income Tax*. Washington, DC: The Brookings Institution, 1976.

Gravelle, Jane G. "Tax Expenditures." *The Encyclopedia of Taxation and Tax Policy*, edited by Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005, pp. 379-380.

Gravelle, Jane G. and Thomas L. Hungerford, *Corporate Tax Reform: Issues for Congress*, Library of Congress, Congressional Research Service Report RL34229, July 24, 2008.

Hildred, William M., and James V. Pinto. "Estimates of Passive Tax Expenditures, 1984," *Journal of Economic Issues,* v. 23. March 1989, pp. 93-106.

Howard, Christopher. *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States*. Princeton, NJ: Princeton Univ. Press, 1997.

Hungerford, Thomas L. "Tax Expenditures: Good, Bad, or Ugly?" *Tax Notes*, October 23, 2006, pp. 325-334.

— . *Tax Expenditures: Trends and Critiques*. Libarary of Congress, Congressional Research Service Report RL33641, Washington, DC: February 4, 2008.

— . *Tax Expenditures and the Federal Budget*. Libarary of Congress, Congressional Research Service Report RL34622, Washington, DC: September 10, 2008.

King, Ronald F. "Tax Expenditures and Systematic Public Policy: An Essay on the Political Economy of the Federal Revenue Code," *Public Budgeting and Finance*, v. 4. Spring 1984, pp. 14-31.

Klimschot, JoAnn. *The Untouchables: A Common Cause Study of the Federal Tax Expenditure Budget*. Washington, DC: Common Cause, 1981.

Ladd, Helen. *The Tax Expenditure Concept After 25 Years*. Presidential Address to the National Tax Association. *Proceedings of the 86th Annual Conference 1994*, Columbus, Ohio: National Tax Association, 1995, 50-57.

McLure, Charles E., Jr. *Must Corporate Income Be Taxed Twice?* Washington, DC: The Brookings Institution, 1979.

Mikesell, John L. "The Tax Expenditure Concept at the State Level: Conflict Between Fiscal Control and Sound Tax Policy," *Proceedings of the 94th Annual Conference 2001*, Washington, D.C.: National Tax Association, 2002, 265-272.

Neil, Bruce. "Tax Expenditures and Government Policy." Kingston, Ontario: John Deutsche Institute for the Study of Economic Policy, 1989.

Noto, Nonna A. "Tax Expenditures: The Link Between Economic Intent and the Distribution of Benefits Among High, Middle, and Low Income Groups." Library of Congress, Congressional Research Service Multilith 80-99E. Washington, DC: May 22, 1980.

Pechman, Joseph A., ed. *Comprehensive Income Taxation*. Washington, DC: The Brookings Institution, 1977.

— . *Federal Tax Policy: Revised Edition*. Washington, DC: The Brookings Institution, 1980.

— . *What Should Be Taxed: Income or Expenditures?* Washington, DC: The Brookings Institution, 1980.

— . *Who Paid the Taxes, 1966-85*. Washington, DC: The Brookings Institution, 1985.

Schick, Allen. "Controlling Nonconventional Expenditure: Tax Expenditures and Loans," *Public Budgeting and Finance*, v. 6. Spring 1986, pp. 3-19.

Schroeher, Kathy. *Gimme Shelters: A Common Cause Study of the Review of Tax Expenditures by the Congressional Tax Committees*. Washington, DC: Common Cause, 1978.

Simon, Karla, "The Budget Process and the Tax Law," *Tax Notes*, v. 40. August 8, 1988, pp. 627-637.

Steuerle, Eugene, and Michael Hartzmark. "Individual Income Taxation, 1947-79," *National Tax Journal*, v. 34, no. 2. June 1981, pp. 145-166.

Sugin, Linda. "What is Happening to the Tax Expenditure Budget?" Tax Notes, August 16, 2004.

Sunley, Emil M. "The Choice Between Deductions and Credits," *National Tax Journal*, v. 30, no. 3. September 1977, pp. 243-247.

Surrey, Stanley S. *Pathways to Tax Reform*. Cambridge, MA: Harvard University Press, p. 3.

U.S. Government Accountability Office. *Tax Expenditures Represent a Substantial Federal Commitment and Need to be Reexamined*, GAO-05-690, Washington, DC: 2005.

EXCLUSION OF BENEFITS AND ALLOWANCES TO ARMED FORCES PERSONNEL

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	3.6	-	3.6
2009	3.9	-	3.9
2010	4.1	-	4.1
2011	4.4	-	4.4
2012	4.5	-	4.5

Authorization

Sections 112 and 134, and court decisions [see *Jones v. United States*, 60 Ct. Cl. 552 (1925)].

Description

Military personnel are provided with a variety of in-kind benefits (or cash payments given in lieu of such benefits) that are not taxed. These benefits include medical and dental benefits, group term life insurance, professional education and dependent education, moving and storage, premiums for survivor and retirement protection plans, subsistence allowances, uniform allowances, housing allowances, overseas cost-of-living allowances, evacuation allowances, family separation allowances, travel for consecutive overseas tours, emergency assistance, family counseling and defense counsel, burial and death services, travel of dependents to a burial site, and a number of less significant items.

Other benefits include certain combat-zone compensation and combat-related benefits. In addition, any member of the armed forces who dies while in active service in a combat zone or as a result of wounds, disease, or injury incurred while in service is excused from all tax liability. Any unpaid tax

due at the date of the member's death (including interest, additions to the tax, and additional amounts) is abated. If collected, such amounts are credited or refunded as an overpayment. (Medical benefits for dependents are discussed subsequently under the Health function.) Families of members of the armed forces receive a $100,000 death gratuity payment for deceased members of the armed forces. The full amount of the death gratuity payment is tax-exempt.

The personal use of an automobile is not excludable as a qualified military benefit.

The rule that the exclusion for qualified scholarships and qualified tuition reductions does not apply to amounts received that represent compensation for services no longer applies in the case of amounts received under the Armed Forces Health Professions Scholarship and Financial Assistance Program or the F. Edward Hebert Armed Forces Health Professions Scholarship and Financial Assistance Program. Recipients of these scholarships are obligated to serve in the military at an armed forces medical facility.

Impact

Many military benefits qualify for tax exclusion. That is to say, the value of the benefit (or cash payment made in lieu of the benefit) is not included in gross income. Since these exclusions are not counted in income, the tax savings are a percentage of the amount excluded, dependent upon the marginal tax bracket of the recipient.

An individual in the 10-percent tax bracket (the lowest income tax bracket) would not pay taxes equal to $10 for each $100 excluded. Likewise, an individual in the 35-percent tax bracket (the highest income tax bracket) would not pay taxes of $35 for each $100 excluded. Hence, the same exclusion can be worth different amounts to different military personnel, depending on their marginal tax bracket. By providing military compensation in a form not subject to tax, the benefits have greater value for members of the armed services with high income than for those with low income.

The exclusion of qualified medical scholarships will primarily benefit students, therefore most beneficiaries are likely to have low tax rates. As noted earlier, the tax benefit of an exclusion varies according to the marginal tax rate of the individual.

Rationale

In 1925, the United States Court of Claims in *Jones v. United States*, 60 Ct. Cl. 552 (1925), drew a distinction between the pay and allowances provided military personnel. The court found that housing and housing allowances were reimbursements similar to other non-taxable expenses authorized for the executive and legislative branches.

Prior to this court decision, the Treasury Department had held that the rental value of quarters, the value of subsistence, and monetary commutations were to be included in taxable income. This view was supported by an earlier income tax law, the Tax Act of August 27, 1894, (later ruled unconstitutional by the Courts) which provided a two- percent tax "on all salaries of officers, or payments to persons in the civil, military, naval, or other employment of the United States."

The principle of exemption of armed forces benefits and allowances evolved from the precedent set by *Jones v. United States*, through subsequent statutes, regulations, or long-standing administrative practices.

The Tax Reform Act of 1986 (P.L. 99-514) consolidated these rules so that taxpayers and the Internal Revenue Service could clearly understand and administer the tax law consistent with fringe benefit treatment enacted as part of the Deficit Reduction Act of 1984 (P.L. 98-369). Provisions added by the Military Family Tax Relief Act of 2004 (P.L. 108-121) in November 2003 clarified uncertainty concerning the U.S. Treasury Department's authority to add dependent care assistance programs to the list of qualified military benefits.

For some benefits, the rationale was a specific desire to reduce tax burdens of military personnel during wartime (as in the use of combat pay provisions); other allowances were apparently based on the belief that certain types of benefits were not strictly compensatory, but rather intrinsic elements in the military structure.

The Economic Growth and Tax Reconciliation Relief Act of 2001 (P.L. 107-16) simplified the definition of earned income by excluding nontaxable employee compensation, which included combat zone pay, from the definition of earned income. The amount of earned income that armed forces members reported for tax purposes was reduced and caused a net loss in tax benefits for some low-income members of the armed forces. The Working Families Tax Relief Act of 2004 (P.L. 108-311) provided that combat pay that was otherwise excluded from gross income could be treated as earned income for the purpose of calculating the earned income tax credit and the child tax credit, through 2005, a provision that was extended through 2006 by the Gulf Opportunity Zone Act of 2005 (P.L. 109-135), 2007 by the Tax Relief and Health Care Act of 2006 (P.L. 109-432), and made permanent by the Heroes Earnings Assistance and Relief Tax Act of 2008 (P.L. 110-245).

Assessment

Some military benefits are akin to the "for the convenience of the employer" benefits provided by private enterprise, such as the allowances for housing, subsistence, payment for moving and storage expenses, overseas cost-of-living allowances, and uniforms. Other benefits are equivalent to employer-provided fringe benefits such as medical and dental benefits, education assistance, group term life insurance, and disability and retirement benefits.

Some see the provision of compensation in a tax-exempt form as an unfair substitute for additional taxable compensation. The tax benefits that flow from an exclusion do provide the greatest benefits to high- rather than low-income military personnel. Administrative difficulties and complications could be encountered in taxing some military benefits and allowances that currently have exempt status; for example, it could be difficult to value meals and lodging when the option to receive cash is not available. By eliminating exclusions and adjusting military pay scales accordingly, a result might be to simplify decision-making about military pay levels and make "actual" salary more apparent and satisfying to armed forces personnel. If military pay scales were to be adjusted upward, it could increase the retirement income of military personnel. However, elimination of the tax exclusions could also lead service members to think their benefits were being cut, or provide an excuse in the "simplification" process to actually cut benefits, affecting recruiting and retention negatively.

Selected Bibliography

Burrelli, David F. And Jennifer R. Corwell, *Military Death Benefits: Status and Proposals*, Library of Congress, Congressional Research Service Report RL32769 (2008).

Garrison, Larry R. "Tax Planning for Armed Forces Personnel (Part I)," *The Tax Advisor*, v. 30, December 1999, pp. 838-843.

— , "Tax Planning for Armed Forces Personnel (Part II)," *The Tax Advisor*, v. 31, January 2000, pp. 44-47.

Kusiak, Patrick J. "Income Tax Exclusion for Military Personnel During War: Examining the Historical Development, Discerning Underlying Principles, and Identifying Areas for Change," *Federal Bar News and Journal*, v. 39, February 1992, pp. 146-151.

Ogloblin, Peter K. *Military Compensation Background Papers: Compensation Elements and Related Manpower Cost Items, Their Purposes and Legislative Backgrounds*. Washington, DC: Department of Defense, Office of the Secretary of Defense, September 1996, pp. 137-149.

Poulson, Linda L. and Ananth Seetharaman. "Taxes and the Armed Forces," *The CPA Journal*, April 1996, pp. 22-26.

Rousseau, Richard W. "Tax Benefits for Military Personnel in a Combat Zone or Qualified Hazardous Duty Area," *The Army Lawyer*, v. 1999, December 1999, pp. 1-29.

Steurle, Gene. "Tax Relief and Combat Pay," *Tax Notes*, v. 50, January 28, 1991, pp. 405-406.

U.S. Congress, Congressional Budget Office. *Military Family Housing in the United States*. Washington, DC, September 1993, p. 67.

U.S. Congress, House Committee on Veterans' Affairs, Subcommittee on Education, Training and Employment. *Transition Assistance Program*, Hearing, 102nd Congress, 2nd session, Serial no. 102-31. Washington, DC: U.S. Government Printing Office, March 19, 1992.

— , House Committee on Ways and Means. *Tax Benefits for Individuals Performing Services in Certain Hazardous Duty Areas; Report to Accompany H.R. 2778 including Cost Estimate of the Congressional Budget Office, 104th Congress, 2nd Session.* Washington, DC: U.S. Government Printing Office, 1996, p. 14.

— , Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986, H.R. 3838, 99th Congress, Public Law 99-514*. Washington, DC: U.S. Government Printing Office, 1987, pp. 828-830.

—, Joint Committee on Taxation. *Technical Explanation of H.R. 3365, The Military Family Tax Relief Act of 2003," as Passed by the House of Representatives and the Senate.* Washington, DC: U.S. Government Printing Office, 2003, pp. 1-19.

—, Joint Committee on Taxation. *Technical Explanation of H.R. 6081, The "Heroes Earnings Assistance and Relief Act of 2008," as Scheduled for Consideration by the House of Representatives on May 20, 2008.* Washington, D.C: U.S. Government Printing Office, 2008.

U.S. Dept. of Defense. Report and Staff Analysis of the Seventh Quadrennial Review of Military Compensation. Washington, DC: 7 volumes, August 21, 1992.

U.S. Dept. of the Treasury, Internal Revenue Service. *Publication 3: Armed Forces' Tax Guide*. Washington, DC: U.S. Government Printing Office, 2008.

U.S. Dept. of the Treasury, Office of the Secretary. *Tax Reform for Fairness, Simplicity, and Economic Growth; the Treasury Department Report to the President*. Washington, DC: November 1984, pp. 47-48.

U.S. General Accounting Office, "Military Compensation: Active Duty Compensation and Its Tax Treatment," *GAO Report GAO-04-721R* (Washington, DC: April 2004).

— , "Military Personnel: DOD Has Not Implemented the High Deployment Allowance that Could Compensate Servicemembers Deployed Frequently for Short Periods," *GAO Report GAO-04-805* (Washington, DC: June 2004).

— , "Military Personnel: Bankruptcy Filings Among Active Duty Servicemembers," *GAO Report GAO-04-465R* (Washington, DC: February 2004).

— , "Military Compensation: Active Duty Compensation and Its Tax Treatment," *GAO Report GAO-04-721R* (Washington, DC: April 2004).

U.S. Government Accountability Office , "Military Personnel: DOD Needs to Improve the Transparency and Reassess the Reasonableness, Appropriateness, Affordability, and Sustainability of Its Military Compensation System," *GAO Report GAO-05-798*, (Washington, D.C.: July 2005).

EXCLUSION OF MILITARY DISABILITY BENEFITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	-	0.2
2009	0.2	-	0.2
2010	0.2	-	0.2
2011	0.2	-	0.2
2012	0.2	-	0.2

Authorization

Section 104(a)(4) or (5) and 104(b).

Description

Members of the armed forces on or before September 24, 1975, are eligible for tax exclusion of disability pay. The payment from the Department of Defense is based either on the percentage-of-disability or years-of-service methods.

In the case of the percentage-of-disability method, the pension is the percentage of disability multiplied by the terminal monthly basic pay. These disability pensions are excluded from gross income.

In the years-of-service method, the terminal monthly basic pay is multiplied by the number of service years times 2.5. Only that portion that would have been paid under the percentage-of-disability method is excluded from gross income.

Members of the United States armed forces joining after September 24, 1975, and who retire on disability, may exclude from gross income Department of Defense disability payments equivalent to disability payments

they could have received from the Department of Veterans Affairs. Otherwise, Department of Defense disability pensions may be excluded only if the disability is directly attributable to a combat-related injury.

Under the Victims of Terrorism Tax Relief Act of 2001 an exclusion from gross income for disability income is extended to any individual (civilian or military) when attributable to a terrorist or military action regardless of where the activity occurs (inside or outside the United States).

Impact

Disability pension payments that are exempt from tax provide more net income than taxable pension benefits at the same level. The tax benefit of this provision increases as the marginal tax rate increases, and is greater for higher-income individuals.

Rationale

Typically, acts which provided for disability pensions for American veterans also provided that these payments would be excluded from individual income tax. In 1942, the provision was broadened to include disability pensions furnished by other countries (many Americans had joined the Canadian armed forces). It was argued that disability payments, whether provided by the United States or by Canadian governments, were made for essentially the same reasons and that the veteran's disability benefits were similar to compensation for injuries and sickness, which at that time was already excludable from income under Internal Revenue Code provisions.

In 1976, the exclusion was repealed, except in certain instances. Congress sought to eliminate abuses by armed forces personnel who were classified as disabled shortly before becoming eligible for retirement in order to obtain tax-exempt treatment for their pension benefits. After retiring from military service, some individuals would earn income from other employment while receiving tax-free military disability benefits. Since present armed forces personnel may have joined or continued their service because of the expectation of tax-exempt disability benefits, Congress deemed it equitable to limit changes in the tax treatment of disability payments to those joining after September 24, 1975.

Assessment

The exclusion of disability benefits paid by the federal government alters the distribution of net payments to favor higher income individuals. If individuals had no other outside income, distribution could be altered either

by changing the structure of disability benefits or by changing the tax treatment.

The exclusion causes the true cost of providing for military personnel to be understated in the budget.

Selected Bibliography

Bittker, Boris I. "Tax Reform and Disability Pensions — the Equal Treatment of Equals," *Taxes*, v. 55. June 1977, pp. 363-367.

Cullinane, Danielle. *Compensation for Work-Related Injury and Illness*. Santa Monica, CA: RAND, 1992. 60pp. (RAND Publication Series N-3343-FMP.)

Ogloblin, Peter K. *Military Compensation Background Papers: Compensation Elements and Related Manpower Cost Items, Their Purposes and Legislative Backgrounds*. Washington, DC: U.S. Government Printing Office, September 1996, pp. 545-556.

Poulson, Linda L. and Ananth Seetharaman. "Taxes and the Armed Forces," *The CPA Journal*, April 1996, pp. 22-26.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1976 (H.R. 10612, 94th Congress; Public Law 94-455)*. Washington, DC: U.S. Government Printing Office, 1976, pp. 129-131.

U.S. Dept. of the Treasury, Office of the Secretary. *Tax Reform for Fairness, Simplicity, and Economic Growth; the Treasury Department Report to the President.* Washington, DC: November, 1984, pp. 51-57.

U.S. General Accounting Office. *Disability Benefits: Selected Data on Military and VA Recipients; Report to the Committee on Veterans' Affairs, House of Representatives*, GAO/HRD-92-106. Washington, DC: August 1992, pp. 19.

— . *Disability Compensation: Current Issues and Options for Change.* Washington, DC: 1982.

— . *VA Disability Compensation: Comparison of VA Benefits with those of Workers' Compensation Programs*, Report to the Chairman, Subcommittee on Benefits, Committee on Veterans' Affairs, House of Representatives. Washington, DC: General Accounting Office, February 14, 1997.

— . *VA Disability Compensation: Disability Ratings May Not Reflect Veterans' Economic Losses*, Report to the Chairman, Insurance and Memorial Affairs, Committee on Veterans' Affairs, House of Representatives. Washington, DC: Government Accounting Office, January 7, 1997.

— . *Military and Veterans' Benefits: Observations on the Concurrent Receipt of Military Retirement and VA Disability Compensation*, Testimony before the Subcommittee on Personnel, Committee on Armed Services, U.S. Senate, March 27, 2003.

DEDUCTION FOR OVERNIGHT-TRAVEL EXPENSES OF NATIONAL GUARD AND RESERVE MEMBERS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	[1]	-	[1]
2009	0.1	-	0.1
2010	0.1	-	0.1
2011	0.1	-	0.1
2012	0.1	-	0.1

[1] Positive tax expenditure of less than $50 million

Authorization

Section 162.

Description

An above-the-line deduction is available for un-reimbursed overnight travel, meals, and lodging expenses of National Guard and Reserve members. In order to qualify for the provision, he or she must have traveled more than 100 miles away from home and stayed overnight as part of an activity while on official duty. The deduction applies to all amounts paid or incurred in tax years beginning after December 31, 2002. No deduction is generally permitted for commuting expenses to and from drill meetings and the amount of expenses that may be deducted may not exceed the general Federal Government per diem rate applicable to that locale.

This deduction is available to taxpayers regardless of whether they claim the standard deduction or itemize deductions when filing their income tax return. The deduction is not restricted by the overall limitation on itemized deductions.

Impact

The value of the benefit (or cash payment made in lieu of the benefit) is not included in gross income. Since these deductions are not counted in income, the tax savings are a percentage of the amount excluded, dependent upon the marginal tax bracket of the recipient.

An individual in the 10-percent tax bracket (Federal tax law's lowest tax bracket) would not pay taxes equal to $10 for each $100 excluded. Likewise, an individual in the 35-percent tax bracket (Federal law's highest tax bracket) would not pay taxes of $35 for each $100 excluded. Hence, the same exclusion can be worth different amounts to different military personnel, depending on their marginal tax bracket. By providing military compensation in a form not subject to tax, the benefits have greater value for members of the armed services with high income than for those with low income.

One of the benefits of an "above-the-line" deduction is that it reduces the taxpayer's adjusted gross income (AGI). As AGI increases, it can cause other tax deductions and credits to be reduced or eliminated. Therefore, deductions that reduce AGI will often provide a greater tax benefit than deductions "below-the-line" that do not reduce AGI.

Rationale

The deduction was authorized by the Military Family Tax Relief Act of 2003 (P.L. 108-121) which expanded tax incentives for military personnel. Under previous law, the expenses could have been deducted as itemized deductions only to the extent that they and other miscellaneous deductions exceeded 2 percent of adjusted gross income. Thus reservists who did not itemize were not able to deduct these expenses and reservists who did itemize could deduct the expenses only in reduced form.

In enacting the new deduction, Congress identified the increasing role that Reserve and National Guard members fulfill in defending the nation and a heavy reliance on service personnel to participate in national defense. Congress noted that more than 157,000 reservists and National Guard were on active duty status — most assisting in Operation Iraqi Freedom at the time of enactment.

Assessment

Some military benefits are akin to the "for the convenience of the employer" benefits provided by private enterprise, such as the allowances for housing, subsistence, payment for moving and storage expenses, overseas cost-of-living allowances, and uniforms. Other benefits are equivalent to

employer-provided fringe benefits such as medical and dental benefits, education assistance, group term life insurance, and disability and retirement benefits. The tax deduction can be justified both as a way of providing support to reservists and as a means of easing travel expense burdens.

Selected Bibliography

Garrison, Larry R. "Tax Planning for Armed Forces Personnel (Part I)," *The Tax Advisor*, v. 30, December 1999, pp. 838-843.

— , "Tax Planning for Armed Forces Personnel (Part II)," *The Tax Advisor*, v. 31, January 2000, pp. 44-47.

Kusiak, Patrick J. "Income Tax Exclusion for Military Personnel During War: Examining the Historical Development, Discerning Underlying Principles, and Identifying Areas for Change," *Federal Bar News and Journal*, v. 39, February 1992, pp. 146-151.

Ogloblin, Peter K. *Military Compensation Background Papers: Compensation Elements and Related Manpower Cost Items, Their Purposes and Legislative Backgrounds*. Washington, DC: Department of Defense, Office of the Secretary of Defense, September 1996, pp. 137-149.

Poulson, Linda L. and Ananth Seetharaman. "Taxes and the Armed Forces," *The CPA Journal*, April 1996, pp. 22-26.

U.S. Congress, House Committee on Veterans' Affairs, Subcommittee on Education, Training and Employment. *Transition Assistance Program*, Hearing, 102nd Congress, 2nd session, Serial no. 102-31. Washington, DC: U.S. Government Printing Office, 1992.

— , House Committee on Ways and Means. *Tax Benefits for Individuals Performing Services in Certain Hazardous Duty Areas; Report to Accompany H.R. 2778 including Cost Estimate of the Congressional Budget Office, 104th Congress, 2nd Session.* Washington, DC: U.S. Government Printing Office, 1996.

— , Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986, H.R. 3838, 99th Congress, Public Law 99-514*. Washington, DC: U.S. Government Printing Office, 1987, pp. 828-830.

— , Joint Committee on Taxation. *Technical Explanation of H.R. 3365, The "Military Family Tax Relief Act of 2003," as Passed by the House of Representatives and the Senate.* Washington, DC: U.S. Government Printing Office, 2003, pp. 1-19.

U.S. Dept. of Defense. Report and Staff Analysis of the Seventh Quadrennial Review of Military Compensation. Washington, 7 volumes, August 21, 1992.

U.S. Dept. of the Treasury, Internal Revenue Service. *Publication 3: Armed Forces' Tax Guide*. Washington, DC: U.S. Government Printing Office, 2008.

U.S. Dept. of the Treasury, Office of the Secretary. *Tax Reform for Fairness, Simplicity, and Economic Growth; the Treasury Department Report to the President*. Washington, DC: November 1984, pp. 47-48.

U.S. General Accounting Office, *Military Compensation: Active Duty Compensation and Its Tax Treatment*, GAO Report GAO-04-721R (Washington: May 2004), pp. 1-32.

National Defense

EXCLUSION OF COMBAT PAY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2005	1.4	-	1.4
2006	1.3	-	1.3
2007	1.1	-	1.1
2008	0.9	-	0.9
2009	0.9	-	0.9

Authorization

Section 112.

Description

Compensation received by active members of the Armed Forces is excluded from gross income for any month the service member served in a combat zone or was hospitalized as the result of an injury or illness incurred while serving in a combat zone. For commissioned officers, the exclusion is limited to the maximum compensation for active enlisted military personnel. For hospitalized service members, the exclusion is limited to two years after the service member ended service in the combat zone.

Impact

Section 112 excludes from gross income the compensation received by service members while on active duty in a combat zone. Compensation received by service members is generally taxable.

Rationale

The exclusion for combat pay began during World War I, when military compensation up to $3,500 was exempt from income. During World War II, compensation of all active duty military personnel and certain federal government agency employees was exempt from income taxes. During the Korean War, the exclusion was limited to active military personnel in a combat zone, and the amount of the exclusion was limited for commissioned officers. By the end of the Korean War, the exclusion was made permanent. Generally, compensation paid to active military personnel in a combat zone is increased to reflect the hazards inherent to duty in a combat zone. Excluding combat pay from taxation may reflect general public recognition of such military service.

Assessment

The exclusion of combat pay significantly reduces, or eliminates the tax burden, for active military personnel serving in a combat zone.

Selected Bibliography

U.S. Department of the Treasury, Internal Revenue Service, *Publication 3, Armed Forces Tax Guide*, 2007.

EXCLUSION OF INCOME EARNED ABROAD BY U.S. CITIZENS

Estimated Revenue Loss*

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	4.9	-	4.9
2009	5.2	-	5.2
2010	5.4	-	5.4
2011	5.7	-	5.7
2012	6.0	-	6.0

Authorization

Section 911.

Description

U.S. citizens are generally subject to U.S. taxes on their foreign — as well as domestic source income. Section 911 of the tax code, however, permits U.S. citizens (other than Federal employees) who live and work abroad an exclusion of wage and salary income from taxable income. (Foreign tax credits, however, cannot be claimed for foreign taxes paid on excluded income.) The amount that can be excluded has been indexed for U.S. inflation since tax year 2006; in 2009, the exclusion is $91,400. Qualifying individuals can also exclude certain expenditures for overseas housing.

To qualify for either exclusion, a person must be a U.S. citizen, must have their tax home in a foreign country, and must either be a bona fide resident of a foreign country or have lived abroad for at least 330 days of any 12 consecutive months. Qualified income must be "earned" income rather than investment income. If a person qualifies for the exclusion for only part of

the tax year, only part of the exclusion can be claimed. The housing exclusion is designed to approximate the extra housing costs of living abroad. It is equal to the excess of actual foreign housing costs over 16 percent of the applicable year's earned income exclusion amount, but is capped at 30 percent of the taxpayer's maximum foreign earned income exclusion. While a taxpayer can claim both the housing and the income exclusion, the combined exclusions cannot exceed total foreign earned income, including housing allowances.

Impact

The exclusion's impact on U.S. persons working abroad depends partly on whether foreign taxes paid are higher or lower than U.S. taxes. If an expatriate pays high foreign taxes, the exclusion has little importance; the U.S. person can use foreign tax credits to offset any U.S. taxes. For expatriates who pay little or no foreign taxes, however, the exclusion reduces or eliminates U.S. taxes. Available data suggest that U.S. citizens who work abroad have higher real incomes, on average, than persons working in the United States. Thus, where it does reduce taxes the exclusion reduces tax progressivity.

The exclusion's effect on horizontal equity is more complicated. The tax liabilities of U.S. persons working abroad differ from the tax burdens of persons with identical real incomes living in the United States, since the cost of living in the United States and foreign countries is likely to differ. A person working in a high-cost country, thus, needs a higher nominal income to match the real income of a person in the United States; an expatriate in a low-cost country needs a lower nominal income. Since tax brackets, exemptions, and the standard deduction are expressed in terms of nominal dollars, persons living in low-cost countries generally have lower tax burdens than persons with identical real incomes living in the United States. Similarly, if not for the foreign earned income exclusion, U.S. citizens working in high-cost countries would pay higher taxes than their U.S. counterparts.

Because the maximum income exclusion is not linked to the actual cost of living, the provision overcompensates for the cost of living abroad in some cases. Indeed, some have argued that because the tax code does not take into account variations in living costs within the United States, the appropriate equity comparison is between expatriates and a person living in the highest cost area within the United States. In this case, the likelihood that the exclusion reduces rather than improves horizontal equity is increased.

Rationale

The Revenue Act of 1926 provided an unlimited exclusion of earned income for persons residing abroad for an entire tax year. Supporters of the exclusion argued that the provision would bolster U.S. trade performance, since it would provide tax relief to U.S. expatriates engaged in trade promotion.

The subsequent history of the exclusion shows a continuing attempt by policymakers to find a balance between the provision's perceived beneficial effects on U.S. trade and economic performance and perceptions of tax equity. In 1962, the Kennedy Administration recommended eliminating the exclusion in some cases and scaling it back in others in order to "support the general principles of equity and neutrality in the taxation of U.S. citizens at home and abroad." The final version of the Revenue Act of 1962 simply capped the exclusion in all cases at $20,000. The Tax Reform Act of 1976 would have pared the exclusion further (to $15,000), again for reasons of tax equity.

However, the Foreign Earned Income Act of 1978 completely revamped the exclusion so that the 1976 provisions never went into effect. The 1978 Act sought to provide tax relief more closely tied to the actual costs of living abroad. It replaced the single exclusion with a set of separate deductions that were linked to various components of the cost of living abroad, such as the excess cost of living in general, excess housing expenses, schooling expenses, and home-leave expenses.

In 1981, however, the emphasis again shifted to the perceived beneficial effects of encouraging U.S. employment abroad; the Economic Recovery Tax Act (ERTA) provided a large flat exclusion and a separate housing exclusion. ERTA's income exclusion was $75,000 for 1982, but was to increase to $95,000 by 1986. However, concern about the revenue consequences of the increased exclusion led Congress to temporarily freeze the exclusion at $80,000 under the Deficit Reduction Act of 1984; annual $5,000 increases were to resume in 1988. In 1986, as part of its general program of broadening the tax base, the Tax Reform Act fixed the exclusion at the $70,000 level. The Taxpayer Relief Act of 1997 provided the gradual increase of the exclusion to $80,000 by 2002, as well as indexing for U.S. inflation, beginning in 2008.

The Taxpayer Increase Prevention and Reconciliation Act of 2006 (TIPRA; P.L. 109-222) contained new restrictions on both the housing and earned income exclusions as a revenue-raising element designed to partly offset unrelated revenue-losing items in the act. The act contained four principal changes. First, it moved up to 2006 the scheduled indexation of the exclusion. (While the combined, net impact of TIPRA's changes is expected to reduce the benefit's revenue loss, the indexation provision, taken alone, will likely increase it.) Second, TIPRA changed the way tax rates

apply to a taxpayer's income that exceeds the exclusion. Under prior law, if a person had income in excess of the maximum exclusion, tax rates applied to the addition income beginning with the lowest marginal rate. Under TIPRA, marginal rates apply beginning with the rate that would apply if the taxpayer had not used the exclusion. Third, TIPRA changed the "base amount" related to the housing exclusion. Under prior law, the housing exclusion applied to housing exceeding 16 percent of the salary level applicable to the GS-14 federal grade level; TIPRA set the base amount at 16 percent of the foreign earning income exclusion amount ($91,400 for 2009). In addition, TIPRA capped the housing exclusion at 30 percent of excluded income; no cap applied under prior law.

Assessment

The foreign earned income exclusion has the effect of increasing the number of Americans working overseas in countries where foreign taxes are low. This effect differs across countries. As noted above, without section 911 or a similar provision, U.S. taxes would generally be high relative to domestic U.S. taxes and employment abroad would be discouraged in countries where living costs are high. While the flat exclusion eases this distortion in the case of some countries, it also overcompensates in others, thereby introducing new distortions.

The foreign earned income exclusion has been defended on the grounds that it helps U.S. exports; it is argued that U.S. persons working abroad play an important role in promoting the sale of U.S. goods abroad. The impact of the provision is uncertain. If employment of U.S. labor abroad is a complement to investment by U.S. firms abroad — for example, if U.S. multinationals depend on expertise that can only be provided by U.S. managers or technicians — then it is possible that the exclusion has the indirect effect of increasing flows of U.S. capital abroad.

The increased flow of investment abroad, in turn, could trigger exchange-rate adjustments that would increase U.S. net exports. On the other hand, if the exclusion's increase in U.S. employment overseas is not accompanied by larger flows of investment, it is likely that exchange rate adjustments negate any possible effect section 911 has on net exports. Moreover, there is no obvious economic rationale for promoting exports.

Selected Bibliography

Association of the Bar of the City of New York, Committee on Taxation of International Transactions. "The Effect of Changes in the Type of United States Tax Jurisdiction Over Individuals and Corporations: Residence, Source and Doing Business." *Record of the Association of the Bar of the City of New York* 46 (December 1991): 914-925.

Curry, Jeff, Maureen Keenan Kahr, "Individual Foreign-Earned Income and Foreign Tax Credit, 2001." IRS *Statistics of Income Bulletin* (Spring 2004): pp.98-120.

Evans, Jeffrey. "911: The Foreign Earned Income Exclusion — Policy and Enforcement." *Virginia Journal of International Law* 37 (Summer 1997): pp. 891-918.

Gravelle, Jane G., and Donald W. Kiefer. *U.S. Taxation of Citizens Working in Other Countries: An Economic Analysis*. Library of Congress, Congressional Research Service Report 78-91 E. Washington, DC: 1978.

Hrechak, Andrew, and Richard J. Hunter, Jr. "Several Tax Breaks Available for those Working Abroad." *Taxation for Accountants* 52 (May 1994): pp. 282-286.

Oliver, Joseph R. "The Foreign Earned Income Exclusion: An Update" *CPA Journal* 69 (August 1999): 46-50.

U.S. Congress, Conference Committees, 2006. *Tax Increase Prevention and Reconciliation Act of 2005.* Conference report to accompany H.R. 4297. H. Rpt. 109-455, 109th Cong., 2nd sess. Washington, U.S. Government Printing Office, 2006, pp. 307-310.

U.S. Congress, Senate, Committee on Finance. *Background Fact Sheet on Section 911 Prepared by Chairman Grassley's Finance Committee Staff.* Washington, May 25, 2006. Posted on the committee's web site, at [http://finance.senate.gov/press/Gpress/2005/prg052506.pdf]. (Visited Oct. 9, 2008.)

U.S. Congress, Joint Committee on Taxation. *Options to Improve Tax Compliance and Reform Tax Expenditures*. Prepared by the Staff of the Joint Committee on Taxation. Publication JCS-02-05. Washington, Jan. 27, 2005, pp. 174-177.

U.S. Department of the Treasury. *Taxation of Americans Working Overseas: the Operation of the Foreign Earned Income Exclusion in 1987*. Washington, DC: 1993.

APPORTIONMENT OF RESEARCH AND DEVELOPMENT EXPENSES FOR THE DETERMINATION OF FOREIGN TAX CREDITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	0.3	0.3
2009	—	0.3	0.3
2010	—	0.3	0.3
2011	—	0.3	0.3
2012	—	0.4	0.4

Authorization

Sections 861to 863 and 904 and IRS Regulation 1.861-17.

Description

The federal government taxes firms incorporated in the United States on their worldwide income but taxes foreign-based firms on their U.S. income only. When a U.S. firm earns foreign income through a foreign subsidiary, U.S. taxes apply to that income only when it is repatriated to the U.S. parent firm in the form of dividends, royalties, or other income; the foreign income is exempt from U.S. taxation as long as it remains in the control of the foreign subsidiary.

When the foreign-source income is repatriated, the U.S. parent corporation can claim a credit against its U.S. tax liability for any foreign taxes the subsidiary has paid on that income. The credit cannot exceed the U.S. tax due on the foreign-source income. It is intended to avoid double taxation of repatriated foreign income. Excess credits incurred in tax years beginning

after October 22, 2004 may be carried back one year and then carried forward up to 10 years.

U.S. corporations with foreign-source income face an overall limitation on the foreign tax credit they may use in a tax year. The limitation is designed to prevent the credit from being used to lower U.S. tax liability on U.S.-source income. Under the limitation, the foreign tax credit cannot exceed a taxpayer's U.S. income tax liability multiplied by a fraction equal to the taxpayer's foreign-source taxable income divided by its worldwide taxable income. For tax years starting after 2006, this limitation must be calculated separately for two categories (or baskets) of foreign-source income: passive income and general income. In this case, passive income refers to investment income such as dividends and interest and income from what are known as qualified electing funds. Any foreign-source income not considered passive generally is treated as belonging to the general-income basket. In determining its taxable income for each basket, a taxpayer must take into account the expenses, losses, and deductions related to the gross income related to each basket.

Federal tax law requires U.S. multinational corporations to allocate deductible expenses that could be related to both foreign and domestic income, such as interest payments and spending on research and development (R&D), between U.S. and foreign earnings. This allocation is not necessarily inconsequential, as the more costs a firm can assign to U.S. sources, the greater its foreign-source income as a share of total income and the larger its foreign tax credit limitation. For firms subject to lower tax rates on their foreign-source income than on their U.S.-source income, a change in the allocation of a small amount of expenses would not affect the foreign taxes it could claim as a credit. But in the case of firms that have excess foreign tax credits because they pay relatively high taxes on foreign-source income, a shift in the allocation of a small amount of expenses could increase the foreign taxes that are creditable, and thus reduce their U.S. taxes.

This requirement does not apply to research expenses that are incurred to satisfy some legal requirement or government regulation.

While research expenses are capital in nature in that they create assets that earn future income, section 174 allows firms to deduct them as a current expense as an incentive to invest in R&D. Most expenses are allocated to U.S. or foreign income on the basis of their relationship to the sources of gross income. But this matching principle is of little use in allocating research expenses, as they are not closely related to gross income in the current tax year. So a different approach is needed.

The allocation of research expenses between foreign-source and U.S.-source income is governed by a set of regulations (Reg. §1.861-17) issued by the Internal Revenue Service (IRS) in 1995. They proceed on the assumption that research expenses ordinarily deducted under section 174 are

related to all income associated with broad product categories and can be allocated to all sources of that income, such as sales, royalties, or dividends.

The regulations set forth a two-step process for making this allocation. In the first step, research expenses are allocated to a particular class of income, such as sales, royalties, and dividends. Each class of income is then divided among product categories identified by three-digit standard industrial classification (SIC) codes.

The second step is more complicated. It involves apportioning the research expenses allocated to each product category between foreign-source income (or the statutory grouping) and U.S.-source income (or the residual grouping), using either the sales method or the gross-income method. Both methods allocate a fixed (or exclusive) percentage of the research expenses to the geographic location where more than 50 percent of the expenses were incurred. If that location is the United States, then 50 percent of the expenses are apportioned to U.S.-source income under the sales method, and 25 percent are apportioned to U.S. income under the gross-income method. (If that location happens to be another country, then the same percentages would apply to foreign-source income.) A larger fixed allocation can be made if a taxpayer can demonstrate the R&D related to the expenses is likely to have limited or long-delayed commercial applications outside the United States. If a taxpayer chooses the sales method, the amount of research expenses apportioned to foreign-source income for each product category, after subtracting the 50 percent of expenses assigned to U.S. income, is determined by multiplying the remaining expenses by a fraction equal to the taxpayer's foreign sales divided by its total sales for that category. If the taxpayer chooses the gross-income method, the apportionment is done the same way for each product category, except that gross income is used in lieu of sales in the fraction. An allocation using the gross-income method may not reduce the amount of research expenses allocated to foreign-source income to less than 50 percent of the foreign-source allocation produced by the sales method.

Impact

The regulations require U.S.-based multinational corporations to attribute part of their research expenses to foreign-source income, even if their R&D was performed entirely in the United States. This rule raises both their U.S.-source income and their tax liability on that income. But since most foreign governments evidently do not allow subsidiaries earning income in their territories to deduct from their taxable income any research expenses attributable to U.S. operations, the required allocation does not lower by a similar amount the foreign taxes paid by the U.S. parent corporations. As a result, the regulations have the effect of making the foreign tax credits claimed by the average U.S. multinational corporation with R&D

investments larger than they would be if research expenses were allocated strictly according to the location of R&D activity.

The tax expenditure associated with the regulations lies in the larger foreign tax credits that some corporations can use as a result of the required allocation of research expenses to foreign-source income.

Rationale

In issuing regulations on the allocation of research expenses for the determination of the foreign tax credit limitation, the IRS appears to have been guided by the notion that if R&D conducted in the United States often contributes to the development of goods and services sold in foreign markets, then the accurate measurement of foreign income for U.S. multinational companies requires that part of their domestic R&D expenses be deducted from foreign income.

The current regulations under sections 861 to 863 trace their origin to a set of final regulations (Reg. §1.861-8) issued by the IRS in 1977. They required that a multinational firm's research expenses be allocated according to either the proportion of sales that occurred in each country or the proportion of gross income that had its source in each country. This meant, for example, that if a firm received 25 percent of its worldwide revenue from the sale of a product in the United States, then it had to allocate 25 percent of the research costs associated with that product to U.S.-source income and the remaining 75 percent to foreign-source income. The regulations also contained a so-called "place-of-performance" option that allowed a taxpayer to allocate 30 percent of its research expenses to any location where it performed over half of its R&D, before applying the sales formula for the allocation of its remaining research expenses.

The 1977 regulations proved controversial from the start. Critics charged that they reduced domestic R&D spending and encouraged U.S. firms to transfer some of their R&D activities to foreign locations.

Congress responded to these criticisms by adopting a two-year suspension of the regulations through the Economic Recovery Tax Act of 1981 (ERTA). During that period, U.S. firms were allowed to allocate all of their U.S. research costs as they saw fit.

In a report on the regulations mandated by ERTA and issued in 1983, the Treasury Department recommended that the suspension be extended an additional two years to allow more time to assess their likely effects. Congress agreed with the recommendation and suspended the regulations for another two years through the Deficit Reduction Act of 1984. In extending the suspension, it noted that its assessment of the regulations would focus on

whether a repeal would be more effective than other options in boosting domestic business R&D investment.

But when Congress passed the Tax Reform Act of 1986, it indicated that the issue of whether to retain, repeal, or modify the regulations still needed more time for analysis and discussion. So the act extended the suspension through 1987. It also altered the regulations to permit taxpayers using the place-of-performance option to allocate 50 percent of its research expenses to the location where more than half of its R&D was done, and to use the gross-income method to allocate the remaining expenses.

The Technical and Miscellaneous Revenue Act of 1988 temporarily replaced the regulations with a set of more liberal rules that applied in 1988 only. Under the act, firms were required to allocate 64 percent of their domestic research expenses to U.S. income and 64 percent of their foreign research expenses to foreign income for the first four months of the year. The remaining 36 percent of expenses could be allocated using either the gross-income or sales method. For the remaining eight months of 1988, taxpayers were required to use the allocation methods specified in the 1977 regulations.

From 1988 to 1991, Congress passed three measures that retained the requirement that 64 percent of research expenses be allocated to U.S. income: the Omnibus Budget Reconciliation Act of 1989, the Omnibus Budget Reconciliation Act of 1990, and the Tax Extension Act of 1991. This treatment expired on August 1, 1992.

Under the Omnibus Budget Reconciliation Act of 1993, taxpayers were allowed to allocate up to 50 percent of research expenses to U.S. income, and they could allocate the remaining 50 percent between U.S. and foreign income using either the sales or gross-income method. This provision expired on December 31, 1994.

In December 1995, the IRS issued proposed regulations that made three significant changes in the 1977 regulations. First, the proposed regulations would allow taxpayers to identify product categories by using three-digit SIC codes instead of two-digit codes. Second, the percentage of research expenses that could be exclusively allocated to a location under the sales method would rise from 30 percent to 50 percent. Third, a decision to use the sales or gross-income method would be treated as a binding election to use the same method in future tax years. The current regulations emerged from these proposed regulations.

Assessment

The current regulations under sections 861 to 863 governing the allocation of research expenses for the determination of the foreign tax credit limitation

still provoke controversy. One source of controversy concerns their economic rationale.

Proponents argue the regulations are justified mainly because R&D performed by U.S.-based firms in the United States leads to the development of goods and services that they sell profitably at the same time in the United States and in other countries through subsidiaries. Under these circumstances, the accurate measurement of the foreign taxable income of these firms requires that part of their U.S. research expenses be deducted from foreign income.

Critics say this view of the process through which U.S.-based multinational companies earn foreign income from goods and services developed largely through their U.S. R&D activities is unrealistic. In their view, technological innovations generally are exploited commercially first in the country where they were developed, and only after a lengthy and often unpredictable delay are they then sold or used in other countries. Under this scenario, the regulations cannot be justified, as the accurate measurement of U.S. income requires that all (or nearly all) U.S. research expenses be deducted from U.S. income.

A policy issued raised by these differing perspectives relates to the geographic spread of the spillover benefits of R&D investments. If the spillover is primarily international in scope, then the argument made by proponents of the regulations would appear to have merit. But if the spillover is primarily local in scope, then critics would appear to be justified in calling for the repeal of the regulations and their replacement with a set of rules more favorable to the allocation of research expenses to U.S. income.

Another major source of controversy is the impact of the regulations on domestic business investment in R&D and the incentives for U.S. firms to transfer R&D activities overseas.

Critics have long argued that the regulations have the effect of lowering this investment and encouraging U.S. companies to transfer some of their R&D to foreign locations with higher tax rates than U.S. tax rates. Such an undesirable outcome, critics say, results from the impact of the regulations on the worldwide tax liabilities of U.S. multinational corporations, especially those with excess foreign tax credits. Most foreign governments do not allow a deduction for the cost of R&D conducted in the United States. Therefore, allocating a U.S. business expense to foreign rather U.S. income has the same effect on a firm's net tax liability under federal tax law as denying it a deduction for this expense. If a foreign government allows a deduction for this expense, a U.S. firm's foreign taxes would decline but its total tax liability would remain about the same. But if the foreign government disallows a deduction, the increase in the firm's U.S. taxes would not be offset by a reduction in its foreign taxes. In this case, both the

U.S. and foreign governments are taxing income equal in amount to the denied deduction.

According to critics, this double taxation could be a problem for U.S. companies with excess foreign tax credits. It could lead them to reduce domestic business R&D investment and a shift of investment funds to less productive uses. For such companies, the regulations create a tax incentive for shifting R&D operations abroad that is equal to the difference between U.S. tax rates and the tax rates in foreign locations.

In contrast, supporters of the regulations see no compelling reason for the U.S. government to get rid of them and instead permit taxpayers to deduct the entire amount of their U.S. research expenses from U.S. income. They point out that doing so could create a situation that U.S. tax law tries mightily to avoid: the use of foreign tax credits against a firm's tax liability on U.S.-source income. In the view of supporters, if action should be taken to eliminate any double taxation caused by the regulations, it should be taken by foreign governments that disallow a deduction for U.S. research expenses. They also dispute the claim that few foreign governments (if any) permit such a deduction. To the extent that these governments do allow those expenses to be deducted, supporters say that allocating the entire amount of U.S. research expenses to U.S. income would be tantamount to allowing a double deduction and creating a tax subsidy for domestic R&D investment, not a tax penalty as critics charge.

A policy issue raised by these opposing arguments concerns the net effect of current tax law on the incentive to invest in domestic R&D. There seems to be lingering uncertainty over how the regulations have affected this incentive. So additional research on this issue seems warranted. Lawmakers may also wish to know how the regulations have affected the incentive to undertake domestic R&D investment provided by the research tax credit under section 41 and the expensing of eligible research costs under section 174. Given the compelling economic rationale for providing government support for domestic R&D investment, it might be useful to find out if the regulations tend to bolster or undercut the stimulative effect of these two research tax incentives.

Some specialists in international tax policy argue that the rules for the sourcing of income and the allocation of research expenses should be designed to accomplish three aims: 1) to avoid the double taxation of income; 2) to avoid imposing too little tax on income; and 3) to achieve an equitable distribution of tax revenue from the operations of multinational companies among sovereign governments. In their view, the only way to accomplish all three objectives simultaneously is to come to an international consensus on a set of such rules. A harmonization of tax systems among countries that are major players in the global economy would probably be needed to achieve such an understanding. Lawmakers may want to explore such an option in finding a solution to the problems posed by the current

regulations for allocating research expenses for U.S.-based multinational corporations.

Selected Bibliography

Bergquist, Philip J. "Proposed Section 861 Regulations." *The Tax Executive*, vol. 47, no. 6, November/December 1995, pp. 473-477.

Bishcel, Jon E. "Optimizing the Benefits From R&D Expenses Under the Allocation and Apportionment Regs." *Journal of Taxation*, vol. 48, no. 6, p. 332.

Brumbaugh, David L. *Allocation of Research and Development Costs and the U.S. Foreign Tax Credit*. Library of Congress, Congressional Research Service Report 89-220 E. Washington, DC: April 4, 1989.

Goodman, Mark E. "IRS Issues Proposed Regulations on Allocation and Apportionment of Research and Experimental Expenditures." *The Tax Adviser*, vol. 27, no. 9, September 1996, pp. 533-534.

Gravelle, Jane G. and Donald J. Marples. *The Foreign Tax Credit's Interest Allocation Rules*. Library of Congress, Congressional Research Service Report RL34494. Washington, DC: September 29, 2008.

Hines, James R Jr. and Adam B. Jaffe. "International Taxation and the Location of Inventive Activity." in *International Taxation and Multinational Activity*, James R. Hines, Jr., ed. University of Chicago Press, 2001, pp. 201-229.

Rashkin, Michael D. *Practical Guide to Research and Development Tax Incentives*. CCH, Chicago, IL: 2007, pp. 43-47.

U.S. Congress, Committee on Ways and Means, Subcommittee on Oversight. *The Research and Experimentation Tax Credit and the Allocation of Research Expenses Under Internal Revenue Code Section 861*. Hearing, 104th Cong., 1st Sess., GPO, Washington, DC: 1996.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Economic Recovery Tax Act of 1981*. JCS-71-81, GPO, Washington, DC: 1981, pp. 141-142.

EXCLUSION OF CERTAIN ALLOWANCES FOR FEDERAL EMPLOYEES ABROAD

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.9	-	0.9
2009	0.9	-	0.9
2010	1.0	-	1.0
2011	1.0	-	1.0
2012	1.1	-	1.1

Authorization

Section 912.

Description

U.S. Federal civilian employees who work abroad are allowed to exclude from income certain special allowances that are generally linked to the cost of living. They are not eligible for the foreign earned income or housing exclusion provided to private-sector individuals under section 911. (Like other U.S. citizens, they are subject to U.S. taxes and can credit foreign taxes against their U.S. taxes. Federal employees are, however, usually exempt from foreign taxes.)

Specifically, section 912 excludes certain amounts received under the Foreign Service Act of 1980, the Central Intelligence Act of 1949, the Overseas Differentials and Allowances Act, and the Administrative Expenses Act of 1946. The allowances are primarily for the general cost of living abroad, housing, education, and travel. Special allowances for hardship posts are not eligible for exclusion. Section 912 also excludes cost-of-living allowances received by Federal employees stationed in U.S. possessions,

Hawaii, and Alaska. In addition, travel, housing, food, clothing, and certain other allowances received by members of the Peace Corps are excluded.

Impact

Federal employees abroad may receive a significant portion of their compensation in the form of housing allowances, cost-of-living differentials, and other allowances. Section 912 can thus reduce taxes significantly. Since the available data suggest real incomes for Federal workers abroad are generally higher than real incomes in the United States, section 912 probably reduces the tax system's progressivity.

Section 912's impact on horizontal equity (the equal treatment of equals) is more ambiguous. Without it or a similar provision, Federal employees in high-cost countries would likely pay higher taxes than persons in the United States with identical real incomes, because the higher nominal incomes necessary to offset higher living costs would place these employees stationed abroad in a higher tax bracket and would reduce the value of personal exemptions and the standard deduction.

The complete exemption of cost-of-living allowances, however, probably overcompensates for this effect. It is thus uncertain whether the relative treatment of Federal workers abroad and their U.S. counterparts is more or less uneven with section 912. U.S. citizens employed abroad in the private sector are permitted to exclude up to $91,400 in 2009, rather than an amount explicitly linked to cost-of-living allowances. Given that flat amount, whether the tax treatment of federal workers is more or less favorable than that of private sector workers depends of the size of the federal workers' cost-of-living allowance.

Some have argued that because no tax relief is provided for persons in high cost areas in the United States, horizontal equity requires only that persons abroad be taxed no more heavily than a person in the highest-cost U.S. area. It might also be argued that the cost of living exclusion for employees in Alaska and Hawaii violates horizontal equity, since private-sector persons in those areas do not receive a tax exclusion for cost-of-living allowances.

Rationale

Section 912's exclusions were first enacted with the Revenue Act of 1943. The costs of living abroad were apparently rising, and Congress determined that because the allowances merely offset the extra costs of working abroad and since overseas personnel were engaged in "highly important" duties, the Government should bear the full burden of the excess living costs, including any taxes that would otherwise be imposed on cost-of-living allowances.

The Foreign Service Act of 1946 expanded the list of excluded allowances beyond cost-of-living allowances to include housing, travel, and certain other allowances. In 1960, exemptions were further expanded to include allowances received under the Central Intelligence Agency Act and, in 1961, certain allowances received by Peace Corps members were added.

Assessment

The benefit is largest for employees who receive a large part of their incomes as cost-of-living, housing, education, or other allowances. Beyond this, the effects of the exclusions are uncertain. For example, it might be argued that because the Federal Government bears the cost of the exclusion in terms of forgone tax revenues, the measure does not change the Government's demand for personnel abroad and has little impact on the Government's work force overseas.

On the other hand, it could be argued that an agency that employs a person who claims the exclusion does not bear the exclusion's full cost. While the provision's revenue cost may reduce Government outlays in general, an agency that employs a citizen abroad probably does not register a cut in its budget equal to the full amount of tax revenue loss that the employee generates. If this is true, section 912 may enable agencies to employ additional U.S. citizens abroad.

Selected Bibliography

Field, Marcia, and Brian Gregg. U.S. Taxation of Allowances Paid to U.S. Government Employees. In *Essays in International Taxation: 1976* (U.S. Department of the Treasury). Washington, DC: Government Printing Office, 1976, pp. 128-150.

U.S. Internal Revenue Service. *U.S. Government Civilian Employees Stationed Abroad*. Publication 516. Washington, DC: Government Printing Office, 2005.

DEFERRAL OF ACTIVE INCOME OF CONTROLLED FOREIGN CORPORATIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	9.6	9.6
2009	-	10.5	10.5
2010	-	11.3	11.3
2011	-	12.1	12.1
2012	-	12.9	12.9

Authorization

Sections 11(d), 882, and 951-964.

Description

The United States taxes firms incorporated in the United States on their worldwide income but taxes foreign-chartered corporations only on their U.S.-source income. Thus, when a U.S. firm earns foreign-source income through a foreign subsidiary, U.S. taxes apply to the income only when it is repatriated to the U.S. parent firm as dividends or other income; the income is exempt from U.S. taxes as long as it remains in the hands of the foreign subsidiary. At the time the foreign income is repatriated, the U.S. parent corporation can credit foreign taxes the subsidiary has paid on the remitted income against U.S. taxes, subject to certain limitations. Because the deferral principle permits U.S. firms to delay any residual U.S. taxes that may be due after foreign tax credits, it provides a tax benefit for firms that invest in countries with low tax rates.

Subpart F of the Internal Revenue Code (sections 951-964) provides an exception to the general deferral principle. Under its provisions, certain income earned by foreign corporations controlled by U.S. shareholders is

deemed to be distributed whether or not it actually is, and U.S. taxes are assessed on a current basis rather than deferred. Income subject to Subpart F is generally income related to passive investment rather than income from active business operations. Also, certain types of sales, services, and other income whose geographic source is relatively easily shifted is included in Subpart F.

While U.S. tax (less foreign tax credits) generally applies when tax-deferred income is ultimately repatriated to the United States, a provision of the American Jobs Creation Act of 2004 (P.L. 108-357) provided a temporary (one-year) 85% deduction for repatriated dividends. For a corporation subject to the top corporate tax rate of 35%, the deduction had an effect similar to a reduction in the tax rate on repatriations to 5.25%. The deduction applied to a one-year period consisting (at the taxpayer's election) of either the first tax year beginning on or after P.L. 108-357's date of enactment (October 22, 2004) or the taxpayer's last tax year beginning before the date of enactment.

Impact

Deferral provides an incentive for U.S. firms to invest in active business operations in low-tax foreign countries rather than the United States, and thus probably reduces the stock of capital located in the United States. Because the U.S. capital-labor ratio is therefore probably lower than it otherwise would be and U.S. labor has less capital with which to work, deferral likely reduces the general U.S. wage level. At the same time, U.S. capital and foreign labor probably gain from deferral. Deferral also probably reduces world economic efficiency by distorting the allocation of capital in favor of investment abroad.

The one-year deduction for repatriations enacted in 2004 likely increased the repatriation of funds from foreign subsidiaries. However, at least part of the increase likely consisted of a shift in the timing of repatriations from future periods towards the present, as firms took advantage of the one-year window. While the provision was intended, in part, to increase domestic investment — its supporters argued that repatriated funds would be invested in the United States — firms' disposition of the repatriations is not certain.

Rationale

Deferral has been part of the U.S. tax system since the origin of the corporate income tax in 1909. While deferral was subject to little debate in its early years, it later became controversial. In 1962, the Kennedy Administration proposed a substantial scaling-back of deferral in order to reduce outflows of U.S. capital. Congress, however, was concerned about the potential effect of such a step on the position of U.S. multinationals vis-a-vis firms from other countries and on U.S exports. Instead of repealing

deferral, the Subpart F provisions were adopted in 1962, and were aimed at taxpayers who used deferral to accumulate funds in so-called "tax haven" countries. (Hence, Subpart F's concern with income whose source can be easily manipulated.)

In 1975, Congress again considered eliminating deferral, and in 1978 President Carter proposed its repeal, but on both occasions the provision was left essentially intact. Subpart F, however, was broadened by the Tax Reduction Act of 1975, the Tax Reform Act of 1976, the Tax Equity and Fiscal Responsibility Act of 1982, the Deficit Reduction Act of 1984, the Tax Reform Act of 1986, and the Omnibus Reconciliation Act of 1993 (OBRA93). OBRA93 added section 956A to the tax code, which expanded Subpart F to include foreign earnings that firms retain abroad and invest in passive assets beyond a certain threshold.

In recent years, however, the trend has been incremental restrictions of Subpart F and expansions of deferral. For example, the Small Business Job Protection Act of 1996 repealed section 956A. And the Tax Relief Extension Act of 1999 (P.L. 106-170) extended a temporary exemption from Subpart F for financial services income. In 2004, the American Jobs Creation Act relaxed Subpart F in the area of shipping income and provided a one-year temporary tax reduction for income repatriated to U.S. parents from overseas subsidiaries.

Assessment

The U.S. method of taxing overseas investment, with its worldwide taxation of branch income, limited foreign tax credit, and the deferral principle, can either pose a disincentive, present an incentive, or be neutral towards investment abroad, depending on the form and location of the investment. For its part, deferral provides an incentive to invest in countries with tax rates that are lower than those of the United States.

Defenders of deferral argue that the provision is necessary to allow U.S. multinationals to compete with firms from foreign countries; they also maintain that the provision boosts U.S. exports. However, economic theory suggests that a tax incentive such as deferral does not promote the efficient allocation of investment. Rather, capital is allocated most efficiently — and world economic welfare is maximized — when taxes are neutral and do not distort the distribution of investment between the United States and abroad. Economic theory also holds that while world welfare may be maximized by neutral taxes, the economic welfare of the United States would be maximized by a policy that goes beyond neutrality and poses a disincentive for U.S. investment abroad.

Supporters of a "territorial" tax system would permanently exempt U.S. tax on repatriated dividends, thus eliminating U.S. tax even on a postponed

basis. Several arguments have been made in support of territorial taxation. One is based on the notion that changes in the international economy have made economic theory's traditional notions of efficiency and neutrality obsolete. (This analysis, however, is not the consensus views of economists expert in the area.) This argument maintains that efficiency is promoted if taxes do not inhibit U.S. multinationals' ability to compete for foreign production opportunities or interfere with their ability to exploit the returns to research and development. Another argument holds that the current tax system produces so many distortions in multinationals' behavior that simply exempting foreign-source business income from tax would improve economic efficiency.

Selected Bibliography

Altshuler, Rosanne. "Recent Developments in the Debate on Deferral." *Tax Notes* 20 (April 3, 2000), p. 1579.

Ault, Hugh J., and David F. Bradford. "Taxing International Income: An Analysis of the U.S. System and Its Economic Premises." In *Taxation in the Global Economy*, ed. Assaf Razin and Joel Slemrod, 11-52. Chicago: University of Chicago Press, 1990.

Bergsten, C. Fred, Thomas Horst, and Theodore H. Moran. "Tax Issues." In *American Multinationals and American Interests*. Washington, DC: The Brookings Institution, 1977.

Brumbaugh, David L. *Tax Exemption for Repatriated Earnings: Proposals and Analysis*. Library of Congress, Congressional Research Service Report RL32125, (2006).

Desai, Mihir, Fritz Foley, and James Hines, "The Demand for Tax Haven Operations," *Journal of Public Finance v90* (February 2006), pp. 513-531.

Desai, Mihir, and James Hines, "Old Rules and New Realities: Corporate Tax Policy in a Global Setting," *National Tax Journal* 57 (December 2004), pp. 937-960.

Engel, Keith. "Tax Neutrality to the Left, International Competitiveness to the Right, Stuck in the Middle with Subpart F." *Texas Law Review* 79 (May 2001), pp. 1525-1606.

Frisch, Daniel J. "The Economics of International Tax Policy: Some Old and New Approaches." *Tax Notes* 47 (April 30, 1990) , pp. 581-591.

Gourevitch, Harry G. *Anti-Tax Deferral Measures in the United States and Other Countries*. Library of Congress, Congressional Research Service Report 95-1143 A, (1995).

Graetz, Michael J., and Paul W. Oosterhuis, "Structuring an Exemption System for Foreign Income of U.S. Corporations," National Tax Journal 54(December 2001), pp. 771-786.

Gravelle, Jane G. *Reform of U.S. International Taxation: Alternatives.* Library of Congress, Congressional Research Service Report RL34115, (2008).

_. "Issues in International Tax Policy." *National Tax Journal* 57 (September 2004), pp. 773-778.

Grubert, Harry and Rosanne Altshuler. "Corporate Taxes in the World Economy: Reforming the Taxation of Cross-border Income," in *Fundamental Tax Reform: Issues, Choices, and Implications*, John W. Diamond and George R. Zodrow, eds. (Cambridge, MA: MIT Press, 2008), pp. 319-354.

Grubert, Harry, "Comment on Desai and Hines, 'Old Rules and New Realities: Corporate Tax Policy in a Global Setting," *National Tax Journal*, vol. 58, Jun. 2005, pp. 263-278.

_. and John Mutti, *Taxing International Business Income: Dividend Exemption versus the Current System* (Washington: American Enterprise Inst., 2001), 67 pp.

Hartman, David G. "Deferral of Taxes on Foreign Source Income," *National Tax Journal* 30 (December 1977), pp. 457-462.

— . "Tax Policy and Foreign Direct Investment." *Journal of Public Economics* 26 (February 1985), pp. 107-121.

Marples, Donald J. *U.S. Taxation of Overseas Investment and Income: Background and Issues.* Library of Congress, Congressional Research Service Report RL32749, (2008).

Rousslang, Donald. "Deferral and the Optimal Taxation of International Investment Income." *National Tax Journal* 53 (September 2000), pp. 589-601.

Slemrod, Joel. "Effect of Taxation with International Capital Mobility." In *Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax*, ed. Henry J. Aaron, et al., 115-147. Washington, DC: The Brookings Institution, 1988.

U.S. Congress. Joint Committee on Taxation. *Factors Affecting the International Competitiveness of the United States.* Joint Committee Print. 102nd Congress, 1st session. Washington, DC: Government Printing Office, May 30, 1991.

U.S. Department of the Treasury, Office of Tax Policy. *The Deferral of Income Earned Through U.S. Controlled Foreign Corporations.* Washington, DC: December, 2002.

Yoder, Llowell D. "Subpart F in Turmoil: Low Taxed Active Income Under Siege." *Taxes* 77 (March 1999), pp. 142-166.

INVENTORY PROPERTY SALES SOURCE RULE EXCEPTION

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	6.8	6.8
2009	-	7.0	7.0
2010	-	7.2	7.2
2011	-	7.4	7.4
2012	-	7.6	7.6

Authorization

Sections 861, 862, 863, and 865.

Description

The tax code's rules governing the source of inventory sales interact with its foreign tax credit provisions in a way that can effectively exempt a portion of a firm's export income from U.S. taxation.

In general, the United States taxes U.S. corporations on their worldwide income. The United States also permits firms to credit foreign taxes they pay against U.S. taxes they would otherwise owe.

Foreign taxes, however, are only permitted to offset the portion of U.S. taxes due on foreign-source income. Foreign taxes that exceed this limitation are not creditable and become so-called "excess credits." It is here that the source of income becomes important: firms that have excess foreign tax credits can use these credits to reduce U.S. taxes if they can shift income from the U.S. to the foreign operation. This treatment effectively exempts such income from U.S. taxes.

The tax code contains a set of rules for determining the source ("sourcing") of various items of income and deduction. In the case of sales of personal property, gross income is generally sourced on the basis of the residence of the seller. U.S. exports covered by this general rule thus generate U.S. — rather than foreign — source income.

The tax code provides an important exception, however, in the case of sales of inventory property. Inventory that is purchased and then resold is governed by the so-called "title passage" rule: the income is sourced in the country where the sale occurs. Since the country of title passage is generally quite flexible, sales governed by the title passage rules can easily be arranged so that the income they produce is sourced abroad.

Inventory that is both manufactured and sold by the taxpayer is treated as having a divided source. Unless an independent factory price can be established for such property, half of the income it produces is assigned a U.S. source and half is governed by the title passage rule. As a result of the special rules for inventory, up to 50 percent of the combined income from export manufacture and sale can be effectively exempted from U.S. taxes. A complete tax exemption can apply to export income that is solely from sales activity.

Impact

When a taxpayer with excess foreign credits is able to allocate an item of income to foreign rather than domestic sources, the amount of foreign taxes that can be credited is increased and the effect is identical to a tax exemption for a like amount of income. The effective exemption that the source rule provides for inventory property thus increases the after-tax return on investment in exporting. In the long run, however, the burden of the corporate income tax (and the benefit of corporate tax exemptions) probably spreads beyond corporate stockholders to owners of capital in general.

Thus, the source-rule benefit is probably shared by U.S. capital in general, and therefore probably disproportionately benefits upper-income individuals. To the extent that the rule results in lower prices for U.S. exports, a part of the benefit probably accrues to foreign consumers of U.S. products.

Rationale

The tax code has contained rules governing the source of income since the foreign tax credit limitation was first enacted as part of the Revenue Act of 1921. Under the 1921 provisions, the title passage rule applied to sales of personal property in general; income from exports was thus generally assigned a foreign source if title passage occurred abroad. In the particular

case of property both manufactured and sold by the taxpayer, income was treated then, as now, as having a divided source.

The source rules remained essentially unchanged until the advent of tax reform in the 1980s. In 1986, the Tax Reform Act's statutory tax rate reduction was expected to increase the number of firms with excess foreign tax credit positions and thus increase the incentive to use the title passage rule to source income abroad.

Congress was also concerned that the source of income be the location where the underlying economic activity occurs. The Tax Reform Act of 1986 thus provided that income from the sale of personal property was generally to be sourced according to the residence of the seller. Sales of property by U.S. persons or firms were to have a U.S. source.

Congress was also concerned, however, that the new residence rule would create difficulties for U.S. businesses engaged in international trade. The Act thus made an exception for inventory property, and retained the title passage rule for purchased-and-resold items and the divided-source rule for goods manufactured and sold by the taxpayer.

More recently, the Omnibus Budget Reconciliation Act of 1993 repealed the source rule exception for exports of raw timber.

Assessment

Like other tax benefits for exporting, the inventory source-rule exception probably increases exports. At the same time, however, exchange rate adjustments probably ensure that imports increase also. Thus, while the source rule probably increases the volume of U.S. trade, it probably does not improve the U.S. trade balance. Indeed, to the extent that the source rule increases the Federal budget deficit, the provision may actually expand the U.S. trade deficit by generating inflows of foreign capital and their accompanying exchange rate effects. In addition, the source-rule exception probably reduces U.S. economic welfare by transferring part of its tax benefit to foreign consumers.

Selected Bibliography

Brumbaugh, David L. "Export Tax Subsidies," in Cordes, et al., eds., *The Encyclopedia of Taxation and Tax Policy*, 2nd edition. Washington: Urban Institute, 2005. pp. 130-133.

— . *Tax Benefit for Exports: The Inventory Source Rules*. Library of Congress, Congressional Research Service Report 97-414 E. (1997).

Hammer, Richard M., and James D. Tapper. The Foreign Tax Credit Provisions of the Tax Reform Act of 1986. *Tax Adviser* 18 (February 1987), pp. 76-80, 82-89.

Krugman, Paul R. and Maurice Obstfeld. "Export Subsidies: Theory," In *International Economics: Theory and Policy*, 3rd ed. New York: Harper Collins, 1994.

Maloney, David M., and Terry C. Inscoe. A Post-Reformation Analysis of the Foreign Tax Credit Limitations. *International Tax Journal* 13 (Spring 1987), pp. 111-127.

Marples, Donald J.. *Taxes and International Competitiveness*. Library of Congress, Congressional Research Service Report RS22445 (2008).

Rousslang, Donald J. "The Sales Source Rules for U.S. Exports: How Much Do They Cost? *Tax Notes International* 8 (February 21, 1994), pp. 527-535.

— , and Stephen P. Tokarick. The Trade and Welfare Consequences of U.S. Export-Enhancing Tax Provisions. *IMF Staff Papers* 41 (December 1994), pp. 675-686.

U.S. Congress, Joint Committee on Taxation. *Factors Affecting the International Competitiveness of the United States*. Joint Committee Print. 98th Congress, 2nd session. Washington, DC: May 30, 1991.

— . "Determination of Source in Case of Sales of Personal Property." In *General Explanation of the Tax Reform Act of 1986*. Joint Committee Print, 100th Congress, 1st session. May 4, 1987.

U.S. Congressional Budget Office. "Options to Increase Revenues: Eliminate the Source-Rules Exception for Exports." In *Budget Options*. Washington, DC: 2007.

U.S. Department of the Treasury. *Report to the Congress on Earnings Stripping, Transfer Pricing and U.S. Income Tax Treaties*. Washington, DC: 2007.

U.S. Department of the Treasury. *Report to the Congress on the Sales Source Rules*. Washington, DC: 1993.

DEFERRAL OF CERTAIN FINANCING INCOME

Estimated Revenue Loss*

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	2.6	2.6
2009	-	2.9	2.9
2010	-	1.0	1.0
2011	-	-	-
2012	-	-	-

Authorization

Sections 953 and 954.

Description

Under the U.S. method of taxing overseas investment, income earned abroad by foreign-chartered subsidiary corporations that are owned and controlled by U.S. investors or firms is generally not taxed if it is reinvested abroad. Instead, a tax benefit known as "deferral" applies: U.S. taxes on the income are postponed until the income is repatriated to the U.S. parent as dividends or other income.

The deferral benefit is circumscribed by several tax code provisions; the broadest in scope is provided by the tax code's Subpart F. Under Subpart F, certain types of income earned by certain types of foreign subsidiaries are taxed by the United States on a current basis, even if the income is not actually remitted to the firm's U.S. owners. Foreign corporations potentially subject to Subpart F are termed Controlled Foreign Corporations (CFCs); they are firms that are more than 50% owned by U.S. stockholders, each of whom own at least 10% of the CFC's stock. Subpart F subjects each 10% shareholder to U.S. tax on some (but not all) types of income earned by the CFC. In general, the types of income subject to Subpart F are income from

a CFC's passive investment — for example, interest, dividends, and gains from the sale of stock and securities — and a variety of types of income whose geographic source is thought to be easily manipulated.

Ordinarily, income from banking and insurance could in some cases be included in Subpart F. Much of banking income, for example, consists of interest; investment income of insurance companies could also ordinarily be taxed as passive income under Subpart F. Certain insurance income is also explicitly included in Subpart F, including income from the insurance of risks located outside a CFC's country of incorporation. However, Congress enacted a temporary exception from Subpart F for income derived in the active conduct of a banking, financing, or similar business by a CFC predominantly engaged in such a business. Congress also enacted a temporary exception for investment income of an insurance company earned on risks located within its country of incorporation.

In short, Subpart F is an exception to the deferral tax benefit, and the tax expenditure at hand is an exception to Subpart F itself for a range of certain financial services income. Prior to enactment of the Tax Increase Prevention and Reconciliation Act of 2006 (TIPRA; P.L. 109-222), the exception was scheduled to expire at the end of 2006. TIPRA extended the provision for two years, through 2008. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) subsequently extended the provision through 2009.

Impact

The temporary exceptions pose an incentive in certain cases for firms to invest abroad; in this regard its effect is parallel to that of the more general deferral principle, which the exception restores in the case of certain banking and insurance income.

The provision only poses an incentive to invest in countries with tax rates lower than those of the United States; in other countries, the high foreign tax rates generally negate the U.S. tax benefit provided by deferral. In addition, the provision is moot (and provides no incentive) even in low-tax countries for U.S. firms that pay foreign taxes at high rates on other banking and insurance income. In such cases, the firms have sufficient foreign tax credits to offset U.S. taxes that would be due in the absence of deferral. (In the case of banking and insurance income, creditable foreign taxes must have been paid with respect to other banking and insurance income. This may accentuate the importance of the exception to Subpart F.)

Rationale

Subpart F itself was enacted in 1962 as an effort to curtail the use of tax havens by U.S. investors who sought to accumulate funds in countries with low tax rates — hence Subpart F's emphasis on passive income and income whose source can be manipulated. The exception for banking and insurance was likewise in the original 1962 legislation (though not in precisely the same form as the current version). The stated rationale for the exception was that interest, dividends, and like income were not thought to be "passive" income in the hands of banking and insurance firms.

The exceptions for banking and insurance were removed as part of the broad Tax Reform Act of 1986 (Public Law 99-514). In removing the exception (along with several others), Congress believed they enabled firms to locate income in tax haven countries that have little "substantive economic relation" to the income. As passed by Congress, the Taxpayer Relief Act of 1997 (Public Law 105-34) generally restored the exceptions with minor modifications. In making the restoration, Congress expressed concern that without them, Subpart F extended to income that was neither passive nor easily movable. However, the Act provided for only a temporary restoration, applicable to 1998. Additionally, the Joint Committee on Taxation identified the exceptions' restoration as a provision susceptible to line-item veto under the provisions of the 1996 Line-Item Veto Act because of its applicability to only a few taxpaying entities, and President Clinton subsequently vetoed the exceptions' restoration. The Supreme Court, however, ruled the line-item veto to be unconstitutional, thus making the temporary restoration effective for 1998, as enacted.

The banking and insurance exceptions to Subpart F were extended with a few modifications for one year by the Tax and Trade Relief Extension Act of 1998. (The Act was part of Public Law 105-277, the omnibus budget bill passed in October, 1998.) The modifications include one generally designed to require that firms using the exceptions conduct "substantial activity" with respect to the financial service business in question and added a "nexus" requirement under which activities generating eligible income must take place within the CFC's home country. In 1999, Public Law 106-170 extended the provision through 2001. In 2002, Public Law 107-147 extended the provision for five additional years, through 2006. The American Jobs Creation Act of 2004 (P.L. 108-357) added rules permitting, in some circumstances, certain qualifying activities to be undertaken by related entities. TIPRA (P.L. 109-222) extended the provision for two years, through 2008, and the Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the provision through the end of 2009.

Assessment

Subpart F attempts to deny the benefits of tax deferral to income that is passive in nature or that is easily movable. It has been argued that the competitive concerns of U.S. firms are not as much an issue in such cases as they are with direct overseas investment. Such income is also thought to be easy to locate artificially in tax haven countries with low tax rates. But banks and insurance firms present an almost insoluble technical problem; the types of income generated by passive investment and income whose source is easilymanipulated are also the types of income financial firms earn in the course of their active business. The choice confronting policymakers, then, is whether to establish an approximation that is fiscally conservative or one that places most emphasis on protecting active business income from Subpart F. The exceptions' repeal by the Tax Reform Act of 1986 appeared to do the former, while the recent restoration of the exceptions appears to do the latter.

It should be noted that traditional economic theory questions the merits of the deferral tax benefit itself. Its tax incentive for investment abroad generally results in an allocation of investment capital that is inefficient from the point of view of both the capital exporting country (in this case the United States) and the world economy in general. Economic theory instead recommends a policy known as "capital export neutrality" under which marginal investments face the same tax burden at home and abroad. From that vantage, then, the exceptions to Subpart F likewise impair efficiency.

Selected Bibliography

McLaughlin, Megan. "Truly a Wolf, Or Just a Sheep in Wolf's Clothing? The Active Finance Exception to Subpart F." *Virginia Tax Review* 21 (Spring 2002) : 649

Sullivan, Martin A. "Economic Analysis: Large U.S. Banks Keeping More Profits in Tax Havens." Tax Notes, 14 June, 2004, 1340.

U.S. Congress, Joint Committee on Taxation. "Extension and Modification of Exceptions under Subpart F for Active Financing Income." In *General Explanation of Tax Legislation Enacted in the 107th Congress.* Joint Committee Print. 107th Congress, 2nd session. Washington, DC: U.S. Government Printing Office, 2003, pp. 279-283.

U.S. Department of the Treasury, Office of Tax Policy. *The Deferral of Income Earned Through U.S. Controlled Foreign Corporations.* Washington, DC: December, 2002.

Yoder, Lowell D. "The Subpart F Exception for Active Financing Income." *Tax Management International Journal* 31 (June 14, 2002) : 283-303.

AVAILABILITY OF FOREIGN TAX DEDUCTION INSTEAD OF CREDIT

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	0.2	0.2
2009	—	0.2	0.2
2010	—	0.2	0.2
2011	—	0.2	0.2
2012	—	0.3	0.3

Authorization

Section 901

Description

For taxes paid on income earned abroad, taxpayers may elect to either claim a deduction against taxable income or a credit against taxes due. In general, the credit is more advantageous than the deduction, because a credit reduces taxes paid on a dollar-for-dollar basis, while a deduction only reduces income subject to tax. However, in cases where the taxpayer is facing the foreign tax credit limit claiming the deduction will result in a lower tax liability.

Impact

The deduction reduces the U.S. taxes due by some taxpayers who are either unable to claim the foreign tax credit or are constrained by the foreign tax credit limit.

Rationale

The opportunity to deduct foreign taxes paid was a feature in the original 1913 tax code. One possible motivation for the deduction could have been to recognize foreign taxes, like State taxes, as a possible cost associated with earning income. As such, the provision would help correct for mismeasurement of adjusted gross income and be justified on ability to pay or horizontal equity arguments.

Assessment

Deductibility of foreign taxes is consistent with the economic concept of national neutrality. Under this regime, foreign taxes are treated as a business expense and, thus, deductible from taxable income. This results in the foreign return net of foreign tax equaling the domestic before tax return and a nationally efficient allocation of capital. While this maximizes the income or output in the domestic market, it also alters the division of income between capital and labor, shifting income towards labor and away from capital. Because national neutrality distorts the location of investment, it produces an inefficient "deadweight" reduction in world economic welfare.

Selected Bibliography

Feldstein, Martin S., and David Hartment, "The Optimal Taxation of Foreign Source Investment Income," *Quarterly Journal of Economics* 93, (1993).

Rousslang, Donald J., "Foreign Tax Credit," in Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, eds., *The Encyclopedia of Taxation and Tax Policy* (Washington: The Urban Institute, 1999), pp.137-9.

U.S. Department of Treasury, Internal Revenue Service, *Foreign Tax Credit for Individuals,* Publication 514, (2007).

INTEREST EXPENSE ALLOCATION

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	-1.2	-1.2
2009	—	-1.4	-1.4
2010	—	-1.5	-1.5
2011	—	-1.6	-1.6
2012	—	-0.9	-0.9

Authorization

Section 864

Description

The United States, in principle, taxes its resident corporations and individuals on their worldwide income, regardless of where it is earned, under the residence rule. The foreign tax credit and deferral are the key structural pieces of the U.S. taxation of foreign-source income. The foreign tax credit provisions generally permit U.S. taxpayers to credit foreign taxes they pay against U.S. taxes they would otherwise owe — on a dollar-for-dollar basis. This credit is, however, limited.

In order to protect its domestic tax base, the U.S. imposes a limitation on the foreign tax credit. In effect, the tax code only allows foreign tax credits to offset the U.S. tax on foreign source-income. Any foreign taxes paid in excess of the limit become "excess credits" and can be carried back one year and carried forward up to 10 years. When a firm is in an excess credit position, the rules surrounding the sourcing of fungible sources of income, such as interest, become important.

Current law applies the fungibility principle to interest allocation in a manner sometimes referred to as "waters edge" allocation. Under this

system, foreign subsidiaries are not explicitly included in the allocation. This has two implications for the allocation formula. First, only a domestic parent's equity stake in its foreign subsidiary is counted as an asset — excluding the foreign subsidiary's assets financed by debt. The parent's assets, in contrast, are all included in the calculation — whether financed by equity or debt. Secondly, the subsidiary's interest expense is automatically allocated to foreign sources. This occurs since the subsidiary's interest expense reduces dividend payments to the parent, which are all allocated to foreign source income.

Under current law, beginning in 2011, the U.S. will allocate interest expense using a "worldwide"allocation regime. Under a "worldwide" allocation, the borrowing of foreign subsidiaries would be taken into account.

Current law contains a subgroup election for firms that are banks. This election allows the interest allocation rules to be applied separately to the bank and non-bank subsidiaries of a U.S. corporation. Beginning in 2011, this election is available to a wider range of financial intermediaries, including finance companies and insurance firms.

Impact

Under the waters edge interest allocation formula, foreign subsidiaries are not explicitly included in the allocation. This has two implications for the allocation formula. First, only a domestic parent's equity stake in its foreign subsidiary is counted as an asset — excluding the foreign subsidiary's assets financed by debt. The parent's assets, in contrast, are all included in the calculation — whether financed by equity or debt. Secondly, the subsidiary's interest expense is automatically allocated to foreign sources. This occurs since the subsidiary's interest expense reduces dividend payments to the parent, which are all allocated to foreign sources.

In contrast, the basic result of the worldwide interest allocation formula, if elected, is to increase the weight given to foreign assets in the allocation formula. This should in turn result in a greater proportion of the interest expense being allocated to U.S.-source income under the foreign tax credit formula, leading to higher foreign source income and a higher foreign tax credit for firms with excess credits.

The availability of subgroup elections runs counter to the principle of fungibility that is embodied by the interest allocation rules. This result follows from the fact that firms could distribute their borrowing among related subsidiaries to minimize foreign allocations of interest. The expansion of this election beginning in 2011, under current law, could move the U.S. system further from the principle of fungibility.

Rationale

Prior to 1986, each separately incorporated entity allocated its interest expenses separately, based upon its assets. This practice allowed companies to isolate debt offshore, thus allowing U.S. related interest to offset foreign income.

The Tax Reform Act of 1986 (P.L. 99-514) modified the interest allocation rules by adopting a one-taxpayer rule to address concerns that prior law allowed affiliated corporations to reduce U.S. tax on U.S. income by borrowing money through one corporation rather than another.

The American Jobs Creation Act of 2004 (P.L. 108-357) modified the interest allocation rules significantly. The Act mandated a switch from a waters edge to a worldwide view on the fungibility and created a financial institution group election. Congress enacted these changes in response to concerns that the prior view left taxpayers excessively exposed to double taxation of foreign-source income and reduced their incentive to invest in the United States.

Assessment

Assuming debt is fungible, worldwide allocation is a more accurate method of ensuring that the U.S. foreign tax credit is used for its intended purpose: allowing the foreign tax credit to offset the full share of U.S. pre-credit tax that falls on foreign source income, than waters edge based rules. Absent additional rules, however, opportunities for tax planning may limit the achievement of this objective. Also, like the foreign tax credit limit itself, allocation rules tend to contribute to the distortions that discourage equity investment abroad. Worldwide interest allocation rules could, in several ways, increase these distortions relative to current law. The distortions created by current law can be viewed as a cost of collecting taxes — since they increase U.S. revenue — and the potential increased distortion associated with worldwide rules cannot since they decrease U.S. revenue.

The subgroup election provisions in the interest allocation rules do not appear consistent with the general objective of the interest allocation rules. The subgroup election may permit firms to reduce the current domestic interest allocation costs, while achieving foreign interest allocation benefits.

Selected Bibliography

Altshuler, Rosanne and Paolo Fulghieri, "Incentive Effects of Foreign Tax Credits on Multinational Firms," *National Tax Journal,* vol. 7, no. 2, (1994), pp. 349-61.

— - and Jack Mintz, "U.S. Interest Allocation Rules: Effects and Policy," *International Taxation and Public Finance*, vol. 2, no. 1, (1995), pp. 7-35.

Collins, Julie H., and Douglas A. Shackelford, "Foreign Tax Credit Limitations and Preferred Stock Issuances." *Journal of Accounting Research* 30 (Supplement), (1993), pp.103 — 24.

Froot, Kenneth A., and James R. Hines, Jr., "Interest Allocation Rules, Financing Patterns, and the Operations of U.S. Multinationals," in *The Effects of Taxation on Multinational Corporations*, Martin Feldstein, James R. Hines, Jr., and R. Glenn Hubbard, eds., (Chicago: University of Chicago Press, 1995), pp. 277 — 307.

Gravelle, Jane G. and Donald J. Marples, *The Foreign Tax Credit's Interest Allocation Rules,* Library of Congress, Congressional Research Service Report RL 34494. Washington, D.C., 2008.

U.S. Congress, Joint Committee on Taxation, *General Explanation of Tax Legislation Enacted in the 108th Congress,* JCS-5-05, (Washington: GPO, 2005).

SPECIAL RULE FOR INTEREST CHARGE DOMESTIC INTERNATIONAL SALES CORPORATIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.4	0.4
2009	-	0.5	0.5
2010	-	0.5	0.5
2011	-	0.1	0.1
2012	-	0.1	0.1

Authorization

Sections 991-997.

Description

An Interest Charge Domestic Sales Corporations (IC-DISC) is a domestic corporation, usually formed by parent shareholders (e.g., corporations, individuals, and trusts) to be a tax-exempt subsidiary, which exports U.S. products. The parent company pays the IC-DISC a tax deductible commission attributable to qualified export sales. Because the IC-DISC pays no tax, distributions (actual or "deemed") to IC-DISC shareholders are taxed only once, often at the lower individual dividend and capital gains tax rates. As a result, the after tax return to shareholders is enhanced.

IC-DISC shareholders may defer up to $10 million that is attributable to qualified export sales. An interest charge is imposed on shareholders, however,based on the distribution that would have occurred had deferral not been elected. The $10 million deferral restriction was intended to limit the benefit of IC-DISC activity to smaller businesses.

Impact

IC-DISC reduces the effective tax rate on export income. The benefit therefore accrues to the owners of export firms as well as IC-DISC shareholders.

The budgetary impact IC-DISC is relatively small when compared to recent and existing export subsidies. For example, the revenue loss in 2008 from the inventory property sales source rule exception is estimated at $6.8 billion, compared to an estimated $0.4 billion loss stemming from IC-DISC. In 2006, the exclusion of extraterritorial income (ETI) provision, which has been repealed, resulted in an estimated $4.0 billion revenue loss.

Rationale

IC-DISC was intended to increase U.S. exports and provide an incentive for U.S. firms to operate domestically rather than abroad. Additionally, IC-DISC (and DISC in general) was adopted to as a way to partially offset export subsidies offered by foreign countries.

The provision allowing the formation of Domestic International Sales Corporations (DISCs) was enacted as part of the Revenue Act of 1971. Shortly after enactment, several European countries argued that the DISC provision violated the General Agreement of Tarriffs and Trade (GATT) by allowing unlimited tax deferral. A GATT panel concluded that DISC was a prohibited export subsidy. The United States never formally recognized the illegality of DISC.

In response to the GATT panel ruling on DISC, the Tax Reform Act of 1986 enacted a provision allowing for the creation of Interest Charge Domestic International Sales Corporations (IC-DISC) and Foreign Sales Corporations (FSC). A FSC was similar to a DISC in that exporters were required to establish a specially qualified subsidiary corporation to which they sold their products. Unlike DISC, FSC was designed to provide a GATT compliant export benefit by classifying FSC income as foreign-source income not connected with US trade or business, effectively exempting it from U.S. income tax. Although FSCs were foreign-chartered corporations they were allowed a 100% dividends-received deduction, as well as having their income exempted from Subpart F's anti-deferral rules.

In early 2000, the WTO Appellate Body confirmed an earlier ruling that FSC were a prohibited export subsidy. As a result, the FSC provision was repealed and a provision excluding extraterritorial income (ETI) was included in the FSC Repeal and Extraterritorial Income Exclusion Act of 2000 enacted later in the year. The ETI provision provided US exporters with a similar tax benefit offered by FSC, while no longer requiring the FSC

foreign management requirement. The benefit, however, was based on "extraterritorial income," and therefore not based solely on exports, making the ETI provision WTO compliant.

Amid complaints from the European Union and another finding that the ETI provision violated WTO rule, the ETI provision was repealed by the American Jobs Creation Act of 2004. A year earlier, the Jobs and Growth Tax Relief Reconciliation Act of 2003 had cut taxes on dividend and capital gains, re-establishing the attractiveness of IC-DISC, which had been introduced nearly two decades earlier.

Assessment

IC-DISC is a tax incentive that is intended to increase U.S. exports and discourage U.S. corporations from establishing subsidiaries in foreign countries. Proponents argue that IC-DISC stimulates exports and job creation. Economic theory suggests a less optimistic view. With flexible exchange rates, an increase in U.S. exports resulting from IC-DISC likely causes an appreciation of the U.S. dollar relative to foreign currencies. In response, U.S. citizens could be expected to increase their consumption of imported goods, possibly at the expense of domestically produced substitutes. As a result, no improvement in the balance of trade occurs and domestic employment could decrease.

Economic theory also highlights the inefficiencies that IC-DISC may introduce into the allocation of productive economic resources within the U.S. economy, as only domestic exporters may benefit from the subsidy. Additionally, because the tax benefit is related to the production of exported goods and services, domestic consumers receive no direct consumption benefit. Foreign consumers, on the other hand, benefit from lower priced goods.

Selected Bibliography

Belmonte, Cynthia, "Interest-Charge Domestic Sales Corporations, 2000,"Internal Revenue Service. *SOI Bulletin*, *Spring 2004.*

Brumbaugh, David L. *A History of Extraterritorial Income (ETI) and Foreign Sales Corporation (FSC) Export Tax-Benefit Controversy*. Library of Congress, Congressional Research Service Report RL31660. September 22, 2006.

- *DISC: Effects, Issues, and Proposed Replacements*. Library of Congress, Congressional Research Service Report 83-69. April 5, 1983.

Gravelle, Jane, Kent Hughes, and Warren E. Farb. *The Domestic International Sales Corporation (DISC) and its Effect on U.S. Foreign Trade and Employment.* Library of Congress, Congressional Research Service Report 76-92. May 4, 1976.

U.S. Congress, Joint Committee on Taxation. "Foreign Sales Corporations." in *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*. Committee Print, 98th Congress, 2nd Session. Washington, DC: Government Printing Office (1984), pp. 1037-1070.

TAXATION OF REAL PROPERTY GAINS OF FOREIGN PERSONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([2])	([2])	([2])
2009	([2])	([2])	([2])
2010	([2])	([2])	([2])
2011	([2])	([2])	([2])
2012	([2])	([2])	([2])

([2]) Negative tax expenditure of less than $50 million.

Authorization

Sections 897, 1445, 6039C, and 6652

Description

The Foreign Investment in Real Property Tax Act of 1980 (FIRPTA) explicitly classifies the disposition of a U.S. real property interest as effectively connected with U.S. trade or business. Therefore, the net capital gain or loss from the disposition of US real property by a foreigner is subject to U.S. personal and/or corporate income taxes. U.S. real property interests include parcels of real property as well as certain shares in U.S. real property holding corporations.

FIRPTA also requires income tax withholding for the disposition of a U.S. real property interest by a foreign person. The withholding is a deposit towards expected taxes arising from the sale of U.S. real property. In general, the purchaser is responsible for withholding equal to 10% of the purchase price of the property. The 10% withholding is then paid to the Internal Revenue Service. Some foreign entities, for example, partnerships, trusts,

and estates, may be subject to a higher withholding. Failure to withhold the tax may result in the purchaser being liable for the tax.

A number of exemptions from the withholding requirement exist. The most common applyies to U.S. buyers that purchase a principal residence with a sales price of less than $300,000.

Impact

FIRPTA effectively classifies realized real U.S. property appreciation as connected with U.S. business or trade. As a result, real property investment by foreigners is taxed. While the statutory tax incidence (burden) falls on the seller of the property, where the actual incidence of the tax falls will depend on the relative price elasticity of sellers and buyers. If buyers are less responsive to changes in the price of property, sellers may be able to raise prices to compensate for the tax. As a result, the actual burden of the tax will be split between buyers and sellers.

The quantitative impact on the budget of taxing the disposition of U.S. real property by foreigners appears to be small, as indicated by the estimated negative tax expenditures listed in the table above.

Rationale

Prior to the enactment of FIRPTA, foreign investors had used several methods to avoid taxation on the sale of appreciated U.S. real property. FIRPTA was enacted to prevent tax-free dispositions of U.S. real property by foreign investors. By treating real property interests as effectively involved in U.S. trade or business, FIRPTA taxes the capital gain realized by a foreign investor upon sale of U.S. real property. FIRPTA also prevents tax-free disposition through investment in a corporation with sufficient U.S. real property interests.

Assessment

The requirement under FIRPTA that foreign and domestic investors in U.S. property are subject to the same tax treatment increases equity between taxpayers. As a result, the preferential tax treatment provided to foreign investors prior to the enactment of FIRPTA has likely been reduced. Economic theory suggests that, all else equal, the increased tax discourages investment in U.S. real property by foreigners.

The FIRPTA tax withholding requirement reduces the ability of foreign investors to avoid paying taxes on the sale of appreciated U.S. property. The required withholding amounts to a deposit on the expected tax liability. Prior

to the passage of FIRPTA it was possible for foreign investors to avoid paying taxes through U.S. tax treaties, nonrecognition provisions, or by structuring investments through corporations.

Selected Bibliography

Brown, Fred B. "Wither FIRPTA?" *Tax Lawyer*, vol. 57, no. 2, Winter 2004, pp. 295-342.

Sakai, Marcia and James Mak. "Taxation of Foreign Real Property Investments in The U.S.: A State Perspective," University of Hawaii at Manoa, Working paper, no. 90-30, 1990.

U.S. Congress, Joint Committee on Taxation. *Description of Selected Federal Tax Provisions that Impact Land Use, Conservation, and Preservation.* JCX-68-99, Washington, DC, September 28, 1999.

TONNAGE TAX

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.1	0.1
2009	-	0.1	0.1
2010	-	0.1	0.1
2011	-	0.1	0.1
2012	-	0.1	0.1

Authorization

Sections 1352-1359.

Description

All domestic corporations in the United States are subject to tax on their worldwide income. To limit the extent of double taxation, U.S. firms with foreign-source income are allowed a credit against foreign paid taxes. The U.S. also only taxes foreign corporate income sufficiently connected to trade or business in the U.S. Such foreign corporate income is subject to the same tax as domestic corporate income.

Corporations involved in shipping trade and business operations may, as an alternative to the conventional corporate income tax, elect to pay the "tonnage tax". The tonnage tax is a tax on a notional shipping income (rather than on corporate income); the tax rate is equal to the highest corporate income tax rate, which is currently 35%. Notional shipping income is calculated as daily notional shipping income multiplied by the number of days a vessel operates in U.S. foreign trade. Daily notional income is $0.40 per 100 tons of a ship's weight up to 25,000 net tons, and then $0.20 per 100 tons in excess of 25,000 tons. Corporations electing to pay the tonnage tax

are allowed no deductions against notional shipping income, and no credits against tonnage taxes paid.

Impact

For corporations electing to pay the tonnage tax, the expected tax burden is smaller than under the conventional corporate income tax. The expected tax burden is reduced because taxes are no longer directly tied to profitability, but rather to a ship's fixed tonnage. Thus, as profitability increases taxes remain constant.

While the expected tax burden is reduced under the tonnage tax, the actual tax burden may not be. Corporations that suffer losses or that are less profitable than expected may end up paying a tonnage tax that is higher than they would have under the corporate income tax. Again, this is because the tonnage tax is not directly related to profitability.

The direct benefit of a higher after tax return to investment accrues to the owners and shareholders of domestic shipping operators involved in U.S. foreign trade. Owners and shareholders also benefit from increased certainty and clarity with respect to a company's future tax liabilities. U.S. consumers also benefit indirectly in the form of lower priced traded goods. The estimated revenue losses reported in the table above indicate a relatively small budgetary impact from this provision.

Finally, because notional shipping income per ton decreases above the 25,000 ton threshold, the tonnage tax is more beneficial to larger vessels.

Rationale

Enacted as part of the American Jobs Creation Act of 2004 (P.L. 108-357), the tonnage tax was intended to provide relief to U.S. based shipping operators competing with foreign shipping operators registered in countries with tonnage tax regimes. Examples of other countries offering a tonnage based corporate tax include: Belgium, China, Greece, India, Ireland, and the United Kingdom. Proponents of the provision believed U.S. shippers to be at a disadvantage without a comparable tax subsidy. Aside from several small technical changes made by the Gulf Opportunity Zone Act of 2005 (P.L. 109-135), the tonnage tax as enacted remains unchanged.

Assessment

The tonnage tax is intended to assist U.S. based shipping operators by reducing the effective U.S. corporate tax to that found in other countries. By reducing the effective tax rate, economic theory predicts a positive effect on the number of vessels that register within the U.S. In addition, any investment in new vessels that occurs should be expected to also increase the number of U.S. registered ships.

With respect to the tonnage tax's effect on employment, Section 46 of the United States Code (pertaining to manning requirements) generally requires the officers of U.S. registered ships and most other crew members to be U.S. citizens. Therefore, any increase in the number of U.S. registered vessels that is the result of the tonnage tax could have a positive effect on employment among corporations involved in shipping trade and business. The net effect on aggregate employment within the U.S. economy, however, will be determined by the amount to which the increase in shipping trade and business employment represents new job creation.

Selected Bibliography

Brownrigg, Mark, Geoff Dawe, Mike Mann, and Phillip Weston. "Developments in UK Shipping: The Tonnage Tax," *Maritime Policy and Management,* v. 28, no. 3, 2001, pp. 213-223.

Marples, Donald. *U.S. Taxation of Overseas Investment and Income: Background and Issues.* Library of Congress, Congressional Research Service Report RL32749. May 21, 2008.

U.S. Congress, Conference Committees, *American Jobs Creation Act of 2004,* conference report to accompany H.R. 4520, 108th Cong. 2nd sess. H.Rept. 108-755 (Washington: GPO, 2004).

Selkou, Evangela, and Michael Roe. "UK Tonnage Tax: Subsidy or Special Case?,"*Maritime Policy and Management,* v. 29, no. 4, 2002, pp. 393-404.

TAX CREDIT FOR INCREASING RESEARCH EXPENDITURES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	4.9	5.0
2009	0.1	5.6	5.7
2010	[1]	3.6	3.6
2011	[1]	2.8	2.8
2012	[1]	2.2	2.2

[1] Positive tax expenditure of less than $50 million.

Authorization

Section 41.

Description

A taxpayer may claim a non-refundable tax credit for certain research expenditures paid or incurred in carrying on a trade or business. The credit has five components: a regular credit, an alternative incremental credit (AIRC), an alternative simplified incremental credit (ASIC), a credit for basic research, and a credit for energy research. In any tax year, a taxpayer can claim one of the first three and one or both of the final two, if eligible.

The regular credit is equal to 20 percent of a business taxpayer's qualified research expenditures for the current tax year above a base amount. Computing this amount hinges on whether a business taxpayer is regarded as an established firm under the rules governing the use of the credit. For an established firm, which is a firm that had taxable income and qualified research expenditures in at least three of the four years from 1984 to 1988, the base amount is the product of its "fixed-base percentage (FBP)"and its

average gross receipts in the past four tax years; its FBP is simply the ratio of its total research expenditures to its total gross receipts in 1984 to 1988. Under no circumstances can the base amount be equal to less than 50 percent of current-year qualified research expenditures, nor can the FBP exceed 0.16. Firms not considered established are assigned an initial FBP of 0.03 during their first five tax years with both gross receipts and spending on qualified research.

Firms also have the option of claiming the AIRC. It is equal to the sum of 3 percent of a firm's qualified research expenditures above 1 percent but not greater than 1.5 percent of its average gross receipts in the four previous years, 4 percent of its qualified research expenditures above 1.5 percent but not greater than 2.0 percent of the same receipts, and 5 percent of its qualified research expenditures that exceed 2.0 percent of the same receipts. Under the Emergency Economic Stabilization Act of 2008 (P.L. 110-343), the AIRC will not be available in 2009. Firms are generally likely to benefit more from the AIRC than the regular credit if their qualified research expenditures in the current tax year are slightly above their base amounts for the regular credit.

In addition, firms may claim the ASIC, which is equal to 12 percent of expenses that exceed 50 percent of spending in the last three years, or 6 percent if there are no expenditures in any one of those years. In 2009 only, the maximum rate for the ASIC rises to 14 percent.

Payments made by most firms for basic research conducted by universities and non-profit scientific research organizations are eligible for a basic research tax credit. The credit is equal to 20 percent of these payments above a base amount, which is the sum of 1 percent of a taxpayer's in-house and contract research spending in the base period and any excess of its average non-basic research contributions to qualified organizations in the base period, adjusted for increases in the cost of living, over its contributions in the current tax year. Research expenditures used to compute the basic research credit may not also be used to compute the regular credit or the AIRC or ASIC.

Firms may also claim a 20 percent credit for the entire amount of payments for contract research they make to an energy research consortium.

The definition of qualified research has been a contentious issue since the credit first entered the tax code in July 1981. As it now stands, research must satisfy three criteria in order to qualify for the credit. First, the research must relate to activities that can be expensed under section 174, which is to say that the research must be "experimental" in the laboratory sense. Second, the research must be undertaken to discover information that is "technological in nature" and useful in the development of a new or improved product, process, computer software technique, formula, or invention that is to be sold, leased, licensed, or used by the firm performing

the research. Finally, the research must relate to activities that constitute a process of experimentation whose goal is the development of a product or process with a "new or improved function, performance, or reliability or quality."

Not all spending on qualified research is eligible for the incremental or alternative credits. Only outlays for the following purposes can be used to compute the credit:

(1) wages, salaries, and supplies used in research conducted in house;

(2) certain time-sharing costs for computers used in research; and

(3) 65 percent of amounts paid by the taxpayer for contract research; the share rises to 75 percent if non-profit scientific research consortia perform the research, and to 100 percent if the research is performed by qualified small firms, certain universities, or federal laboratories.

The credit does not apply to expenditures for equipment and structures used in qualified research, the fringe benefits of employees involved in this research, and overhead costs related to research activities (e.g., rent, utility costs, leasing fees, administrative and insurance costs, and property taxes). Nor can it be claimed for research done after the start of commercial production, research aimed at adapting existing products for a specific customer's needs, research that duplicates existing products, surveys, routine testing, research to modify computer software for internal use, foreign research, research funded by others, and research in the social sciences, arts, or humanities.

If a taxpayer claims both the research tax credit and a deduction for research expenditures under section 174, then the deduction must be reduced by the amount of the credit. This reduction, which is sometimes referred to as a basis adjustment, has the effect of including the credit in a firm's taxable income, thereby lowering the marginal effective rate of the credit.

The credit may not be claimed for eligible expenses paid or incurred after June 30, 1995 and before July 1, 1996, as the credit had expired for that period and was not been renewed retroactively to cover it.

Impact

The credit reduces the after-tax or net cost to a business of performing qualified research. Though the statutory rate of the regular credit is 20 percent for qualified research expenses above the base amount, the marginal effective rate is considerably less in many cases. The reason lies in some of the rules governing the computation of the credit. One such rule requires that any deduction claimed for research expenditures under section 174 be

reduced by the amount of any research credit claimed. Doing so lowers the credit's marginal effective rate to 13 percent: [0.20 x (1-0.35)]. Another rule stipulates that a firm's base amount for the credit must be equal to 50 percent or more of qualified research expenses in the current tax year. As a result of this rule, the marginal effective rate of the credit can fall to 6.5 percent for research expenditures in excess of double the base amount. This rate can be lower still when outlays for structures and equipment, which are not eligible for the credit, account for a large share of the total cost of an R&D investment. A further constraint on the incentive effect of the credit is the limitations of the general business credit (GBC) under IRC section 38; the credit is one of the 31 credits making up the GBC.

Because of its design, the credit does not benefit all firms undertaking qualified research. For instance, it is of no benefit to firms whose research intensity (i.e., research expenditures as a share of gross receipts in a certain period) is declining. If the reason for the decline in research intensity is faster growth in sales than research expenditures, then it is conceivable that the credit could operate as a slight implicit tax on sales growth.

By contrast, the credit provides the largest benefits to firms whose investment in research and development (R&D) is rising faster than their sales revenue.

Individuals to whom the credit is properly allocated from a partnership or subchapter S corporation may use the credit in a particular year to offset only the tax on their taxable income derived from that business. This means that owners of partnerships or S corporations cannot use research tax credits earned by these entities to offset the tax on income from other sources.

The credit is claimed mostly by C corporations, while its direct tax benefits accrue largely to higher-income individuals (see discussion in the Introduction).

Rationale

The research tax credit has never been a permanent part of the federal tax code. Rather, it has been extended 13 times and significantly modified six times.

Section 41 first entered the federal tax code through the Economic Recovery Tax Act of 1981. Under the act, the credit rate was fixed at 25 percent, there was no basis adjustment, and the base amount was equal to the average of the past three years of research expenditures. Such a design was intended to serve two purposes: (1) to give U.S.-based firms a robust incentive to invest more in R&D than they otherwise would, and (2) to offset some of the significant costs associated with initiating or expanding business R&D programs.

The original credit was supposed to expire at the end of 1985, to give Congress an opportunity to evaluate its effects before deciding whether or not to extend it. It was extended retroactively through 1988, at a reduced rate of 20 percent, by the Tax Reform Act of 1986. The Technical and Miscellaneous Revenue Act of 1988 extended the credit for another year and a half and added a basis adjustment equal to 50 percent of the credit.

Additional changes were made in the credit through the Omnibus Reconciliation Act of 1989. Specifically, the act extended the credit through 1990, allowed the base amount to increase in line with rises in gross receipts rather than research expenditures, allowed the credit to apply to research intended to explore future lines of business as well as to develop current ones, and instituted a full basis adjustment.

The Omnibus Reconciliation Act of 1990 extended the credit through the end of 1991, and the Tax Extension Act of 1991 further extended it through June 1992. After the credit expired and remained in abeyance for about one year, the Omnibus Budget Reconciliation Act of 1993 retroactively extended it through June 1995.

After the credit again expired and lapsed for about one year, the Small Business Job Production Act of 1996 reinstated it retroactively to July 1, 1996 and extended it through May 31, 1997, leaving a one-year gap in coverage that still exists. That act also introduced the three-tiered alternative credit and allowed 75 percent of payments to non-profit research consortia to be eligible for the credit.

The Taxpayer Relief Act of 1997 further extended the credit through June 1998, and the omnibus budget bill passed in 1998 (P.L. 105-277) extended the credit through June 1999. After expiring yet again, the credit was extended to June 30, 2004 by the Ticket to Work and Work Incentives Improvement Act of 1999 (P.L. 106-170). In October 2004, President Bush signed into law a tax bill (the Working Families Tax Relief Act of 2004, P.L. 108-311) that included a provision extending the credit through December 31, 2005.

H.R. 6111, adopted in December 2006, extended the credit through 2007, increased the alternative rates for 2007, and added the alternative simplified credit.

The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) retroactively renewed the credit through 2009. It also increased the rate for the ASIC to 14 percent and abolished the AIRC for 2009 only.

Assessment

Among economists and policymakers, there is widespread agreement that investment in research and development (R&D) is a major driving force behind long-term economic growth through the innovations it spawns. At the same time, there is reason to believe that private R&D investment is less than optimal in economies dominated by competitive markets, mainly because firms other than the firms financing R&D may capture some of the economic benefits from this research. This leakage can occur even in the presence of patents and other forms of intellectual property protection. For example, when a group of research scientists and engineers decides to break away from a company and form a new company for the purpose of developing a technology akin to technologies owned and sold by their former employer, some (or even all) of any returns they eventually earn on their investment might be attributed to the R&D investments made by their former employer. Various researchers have estimated that the social returns to R&D are much larger than the private returns. Without government support for R&D, the private sector is likely to invest less in R&D than its potential social returns would warrant. Public subsidies for R&D (e.g., research tax credits) can help to remedy this market failure, making everyone better off.

Since its enactment in 1981, the research tax credit has provided over $1 billion a year in tax subsidies for business R&D investment. The credit's effectiveness hinges on the sensitivity of this investment to declines in its real after-tax cost. Available evidence suggests that in the 1980s, a decline in this cost of one dollar was associated with an increase in business R&D investment of one to two dollars. Because this sensitivity may shift over long periods, it is not known whether R&D investment remains as responsive today.

Even though the existing credit can be justified on economic grounds and is thought to be cost-effective, it is open to several criticisms. First, a tax subsidy may not be the most efficient way to encourage increased investment in basic research, since an open-ended subsidy like the credit does not necessarily target R&D with the greatest social returns. Second, the lack of a clear and widely accepted definition of the research that qualifies for the credit allows firms to claim the credit for expenses that may have little or nothing to do with R&D. Third, the credit's incentive effect may be insufficient to boost business R&D to levels commensurate with its purported social benefits. Fourth, some critics of the credit contend that it mostly subsidizes R&D that would be performed in the absence of the credit. Finally, the credit's lack of permanence is thought to deter some R&D investment by compounding the uncertainty surrounding the expected after-tax returns on prospective R&D investments.

Selected Bibliography

Altschuler, Rosanne. "A Dynamic Analysis of the Research and Experimentation Credit," *National Tax Journal*, v. 41. December 1988, pp. 453-466.

Atkinson, Robert D. *The Research and Experimentation Tax Credit: A Critical Policy Tool for Boosting Research and Enhancing U.S. Economic Competitiveness*. Information Technology and Innovation Foundation. Washington, D.C.: September 4, 2006.

Baily, Martin Neil, and Robert Z. Lawrence. "Tax Policies for Innovation and Competitiveness," Paper Commissioned by the Council on Research and Technology. Washington, DC, April 1987.

— . "Tax Incentives for R&D: What do the Data Tell Use?" Study Commissioned by the Council on Research and Technology. Washington, DC, 1992.

Berger, Philip G. "Explicit and Implicit Tax Effects of the R&D Tax Credit." *Journal of Accounting Research*, v. 3, August 1993, pp. 131-71.

Bernstein, Jeffry I. and M. Ishaq Nadiri. "Interindustry R&D Spillovers, Rates of Return, and Production in High Tech Industries," *American Economic Review*, v. 76. June 1988, pp. 429-434.

Billings, B. Anthony and Randolph Paschke, "Would H.R. 463 Improve the Competitiveness of U.S. R&D Tax Incentives?," *Tax Notes*, June 9, 2003, pp. 1509-1524.

— . "Permanent Research Tax Credit Could Reverse Offshoring of Jobs," *Tax Notes*, March 29, 2004, pp. 1655-1666.

Brown, Kenneth M., ed. *The R&D Tax Credit. Issues in Tax Policy and Industrial Innovation*. Washington, DC: American Enterprise Institute for Public Policy, 1984.

Busom, Isabel. *An Empirical Evaluation of the Effects of R&D Subsidies.* Burch Working Paper No. B99-05. Berkeley, CA, University of California, Berkeley, May 1999.

Cordes, Joseph J. "Tax Incentives for R&D Spending: A Review of the Evidence," *Research Policy,* v. 18. 1989, pp. 119-133.

— . "Research and Experimentation Tax Credit." *The Encyclopedia of Taxation and Tax Policy*, edited by Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005. pp. 330-332.

Cox, William A. *Research and Experimentation Credits: Who Got How Much?* Library of Congress, Congressional Research Service Report 96-505, June 4, 1996.

Ernst & Young. *Supporting Innovation and Economic Growth: the Broad Impact of the R&D Credit in 2005*. April 2008.

Gravelle, Jane G. *The Tax Credit for Research and Development: An Analysis*. Library of Congress, Congressional Research Service Report 85-6. Washington, DC, January 25, 1985.

Grigsby, McGee and John Westmoreland, "The Research Tax Credit: A Temporary and Incremental Dinosaur." *Tax Notes*, December 17, 2001, pp. 1627-1640.

Guenther, Gary. *Research and Experimentation Tax Credit: Current Status and Policy Issues for the 108th Congress.* Library of Congress, Congressional Research Service Report No. RL31181. Washington, D.C., October 6, 2008.

Guinet, Jean, and Hroko Kamata. "Do Tax Incentives Promote Innovation?" *OECD Observer*, no. 202, October-November, 1996, pp. 22-25.

Hall, Bronwyn H. "R & D Tax Policy During the 1980s," in *Tax Policy and the Economy* 7, ed. James M. Poterba. Cambridge, MA: MIT Press, 1993.

— , and John van Reenen. *How Effective Are Fiscal Incentives for R&D? A Review of the Evidence.* Working Paper 7098. Cambridge, MA, National Bureau of Economic Research, April 1999.

Hines, James R. "On the Sensitivity of R&D to Delicate Tax Changes: The Behavior of U.S. Multinationals in the 1980s." In *Studies in International Taxation in the 1980s,*" Ed. Alberto Giovanni, R. Glenn Hubbard, and Joel Slemrod. Chicago: The University of Chicago Press, 1993.

Kiley, Michael T. *Social and Private Rates of Return to Research and Development in Industry*. Library of Congress, Congressional Research Service Report 93-770. Washington, DC: August 27, 1993.

Landau, Ralph, and Bruce Hannay, eds. *Taxation, Technology and the U.S. Economy*. NY: Pergamon Press, 1981. See particularly George Carlson, "Tax Policy and the U.S. Economy," (a version of which was published as *Office of Tax Analysis Paper 45*, U.S. Treasury Department, January 1981), pp. 63-86, and Joseph Cordes, "Tax Policies for Encouraging Innovation: A Survey," pp. 87-99.

Mamureas, Theofaris P. and M. Ishaq Nadiri. "Public R&D Policies and Cost Behavior of the U.S. Manufacturing Industries." National Bureau of Economic Research Working Paper 5059, Cambridge, MA, March 1995.

Mansfield, Edwin, *et al*. "Social and Private Rates of Return from Industrial Innovations," *Quarterly Journal of Economics*, v. 41. March 1977, pp. 221-240.

McIntyre, Bob. *Proposed Extension of Corporate Tax Credit: Throwing Good Money After Bad*, Citizens for Tax Justice. Washington, D.C.: May 12, 2006.

Office of Technology Assessment, *The Effectiveness of Research and Experimental Tax Credits*, OTA-BRITC-174, September 1995.

Ohmes, Christopher J., David S. Hudson, and Monique J. Migneault, "Final Research Credit Regulations Expected to Immediately Affect IRS Examinations," *Tax Notes*, February 23, 2004, pp. 1015-1024.

Rashkin, Michael D. *Practical Guide to Research and Development Tax Incentives: Federal, State, and Foreign*. Chicago: CCH Inc., 2007.

Tillinger, Janet W. "An Analysis of the Effectiveness of the Research and Experimentation Tax Credit in a Q Model of Valuation." *The Journal of the American Taxation Association*, Fall 1991, pp. 1-29.

U.S. Congress, House Committee on Ways and Means. *Research and Experimentation Tax Credit* Hearing, 98th Congress, 2nd session. August 2, 1984.

— , Joint Committee on Taxation. *Description and Analysis of Tax Provisions Expiring in 1992*. January 27, 1992: pp. 59-68.

— , Joint Economic Committee. *The R&D Tax Credit: An Evaluation of Evidence on Its Effectiveness*, 99th Congress, 1st Session. Senate Report 99-73, August 23, 1985.

U.S. General Accounting Office. *Additional Information on the Research Tax Credit. Testimony of Natwar Gandhi Before the House Ways and Means Subcommittee on Oversight*. Publication GGD-95-162, Washington, 1995.

— . *Studies of the Effectiveness of the Research Tax Credit*. Publication GGD-96-43. May 1996.

Watson, Harry. "The 1990 R&D Tax Credit: A Uniform Tax on Inputs and a Subsidy for R&D." *National Tax Journal*, v. 49, March 1996, pp. 93-103.

EXPENSING OF RESEARCH AND EXPERIMENTAL EXPENDITURES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	3.1	3.2
2009	0.1	4.8	4.9
2010	0.1	5.6	5.7
2011	0.1	6.7	6.8
2012	0.2	7.8	8.0

[(1)]Less than $50 million.

Authorization

Section 174.

Description

As a general rule, business expenditures to acquire a productive asset with a useful life extending beyond a single tax year, such as a machine tool or computer system, must be capitalized and cannot be deducted in full in the year when the expenditures were made or incurred. These capital costs usually are recovered through depreciation deductions taken over the useful life of the asset, or through the sale or abandonment of the asset.

But under section 174, a business taxpayer may deduct, as a current expense, certain research expenditures that are paid or incurred in connection with the taxpayer's trade or business. This treatment is available even though the research expenditures are likely to produce intangible assets (e.g., patents) with useful lives extending far beyond a single tax year. Alternatively, a taxpayer may treat these expenditures as deferred expenses

and deduct them on a straight-line basis over a period of 60 months or more; this treatment is known as amortization.

Treasury regulations define the expenditures eligible for the section 174 deduction as "research and development costs in the experimental or laboratory sense." The regulations also specify that eligible research expenditures include all costs related to "the development of an experimental or pilot model, a plant process, a product, a formula, an invention, or similar property, and the improvement of already existing property."

Still, not all costs related to research projects may be deducted under section 174. Most notably, expenditures for the acquisition or improvement of land, or for the acquisition or improvement of depreciable or depletable property to be used in connection with research, are not eligible. This means that outlays for structures and equipment used in research and development (R&D) must be recovered over 15 years and 3 years, respectively, using the depreciation schedules allowed under section 167. In addition, expenditures to determine the existence, location, extent, or quality of mineral deposits, including oil and gas, may not be deducted under section 174.

To prevent business taxpayers from receiving two tax benefits for the same research expenditures, the deduction allowed under section 174 must be reduced by the amount (if any) of any credit claimed under section 41 for certain increases in research expenditures.

Impact

The expensing of research spending under section 174 has the effect of deferring taxes on the return to investment in the assets generated by this spending. Such a deferral can yield a significant tax savings, after adjustment for inflation, for a firm over the life of a depreciable asset. For example, if a profitable corporation subject to a marginal corporate tax rate of 35 percent were to spend $1 million on wages and supplies related to R&D in a tax year, it would reduce its tax liability by $350,000. The value to the corporation of this reduction in taxes is the amount by which the present value of the $350,000 exceeds the present value of the reduction in taxes tied to the series of deductions that otherwise would be taken over the useful life of any asset (such as a patent) generated by the research expenditures. Indeed, under certain circumstances, expensing is equivalent to taxing the returns to an asset at a marginal effective rate of zero. This means that expensing has the potential to equalize the after-tax and pre-tax returns on an investment.

The direct beneficiaries of the section 174 deduction obviously are firms that undertake research. For the most part, these tend to be larger manufacturing corporations engaged in developing, producing, and selling technologically advanced products. As a corporate tax deduction, the

benefits of expensing any capital cost accrue mainly to upper-income individuals (see discussion in the Introduction).

Rationale

Section 174 was enacted as part of the Internal Revenue Code of 1954. The legislative history of the act indicates Congress was pursuing two overriding aims in enacting section 174. One was to encourage firms (especially smaller ones) to invest in R&D. The second aim was to eliminate the difficulties and uncertainties facing business taxpayers seeking to write off research expenditures under previous tax law.

Assessment

There appears to be no controversy over the desirability of the provision, reflecting a widely held view that its benefits outweigh its costs. Section 174 simplifies tax compliance and accounting for business taxpayers by eliminating the problems associated with identifying qualified R&D expenditures and assigning useful lives to any assets created through these expenditures. It can also be argued that the provision stimulates business R&D investment by boosting real after-tax returns to such investment and increasing the cash flow of firms engaged in R&D. This effect addresses a perennial concern that firms are investing too little in R&D in the absence of government support, mainly because of the spillover effects of R&D. There is some evidence that the social returns to R&D exceed the private returns.

While these considerations may present a strong economic case for subsidizing R&D investments, they do not necessarily support the use of a tax preference like section 174. A principal shortcoming with tax subsidies like section 174 is that they do not target R&D investments with the largest social benefits.

Selected Bibliography

Baily, Martin Neil, and Robert Z. Lawrence. "Tax Policies for Innovation and Competitiveness," Paper Commissioned by the Council on Research and Technology. April 1987.

Bernstein, Jeffry I., and M. Ishaq Nadiri. "Interindustry R&D Spillovers, Rates of Return, and Production in High Tech Industries," *American Economic Review*, v. 76. June 1988, pp. 429-434.

Cordes, Joseph J. "Tax Incentives for R&D Spending: A Review of the Evidence," *Research Policy,* v. 18. 1989, pp. 119-133.

-. "Expensing." *The Encyclopedia of Taxation and Tax Policy*, edited by Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, D.C.: Urban Institute Press, 2005. pp. 128-130.

Goldbas, Michael and Greg Alan Fairbanks. "The Final Step in Computing the R&E Credit." *Tax Adviser*, vol. 36, no. 3, March 1, 2005, p. 136.

Guenther, Gary. *Research and Experimentation Tax Credit: Current Status and Policy Issues for the 108th Congress.* Library of Congress, Congressional Research Service Report RL31181. Washington, updated October 6, 2008.

Hall, Bronwyn H. and John van Reenen, "How Effective are Fiscal Incentives for R&D? A Review of the Evidence. Working Paper 7098. National Bureau of Economic Research, Cambridge, MA, April 1999.

Hudson, David S. "The Tax Concept of Research or Experimentation." *Tax Lawyer*, v. 45, Fall 1991, pp. 85-121.

Kiley, Michael T. *Social and Private Rates of Return to Research and Development in Industry*. Library of Congress, Congressional Research Service Report 93-770. Washington, DC: August 27, 1993.

Landau, Ralph, and Bruce Hannay, eds. *Taxation, Technology and the U.S. Economy*. New York: Pergamon Press, 1981. See particularly George Carlson, "Tax Policy and the U.S. Economy" (a version of which was published as Office of Tax Analysis Paper 45, U.S. Treasury Department, January 1981), pp. 63-86, and Joseph J. Cordes, "Tax Policies for Encouraging Innovation: A Survey," pp. 87-99.

Lee, Andrew B., "Section 174: "Just in Time" for Deducting Costs of Developing New or Improved Manufacturing Processes," *The Tax Adviser*, July 1996, p. 401.

Mansfield, Edwin, *et al*. "Social and Private Rates of Return from Industrial Innovations," *Quarterly Journal of Economics*, v. 41. March 1977, pp. 221-240.

McClelland, David Huston, "Deductibility of Contract Development Costs Under Section 174," *The Tax Adviser*, January 2000, p. 19.

McConaghy, Mark L. and Richard B. Raye. "Congressional Intent, Long-Standing Authorities Support Broad Reading of Section 174," *Tax Notes*, Feb. 1, 1993, pp. 639-653.

Mamureas, T., and M.J. Nadiri. "Public R&D Policies and Cost Behavior of the U.S. Manufacturing Industries," *Journal of Public Economics,* v. 63, no. 1, pp. 57-83.

Rashin, Michael. D. *Practical Guide to Research and Development Tax Incentives: Federal, State, and Foreign*. CCH, Inc. Chicago: 2007, pp. 61-97.

Tobin, Brian F., "New Regulations Clarify R&E Definition," *The Tax Adviser*, May 1995, p. 287.

U.S. Congress, Congressional Budget Office. *Federal Support for R&D and Innovation*, April 1984.

DEDUCTION OF EXPENDITURES ON ENERGY-EFFICIENT COMMERCIAL BUILDING PROPERTY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	0.1	0.1
2010	([1])	0.1	0.1
2011	([1])	0.1	0.1
2012	([1])	0.1	0.1

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 179D.

Description

Internal Revenue Code section (IRC §) 179D provides a formula-based tax deduction for all or part of the cost of energy efficient commercial building property (i.e., certain major energy-savings improvements made to domestic commercial buildings) placed in service after December 31, 2005 and before January 1, 2014. The maximum cost of energy-efficient commercial building property that may be deducted in any tax year is limited to the product of $1.80 and the square footage of the building, over deductions claimed for energy efficient commercial building property in any prior tax years (Code Sec. 179D(b)). In other words, the deduction is the lesser of: (1) the cost of the energy efficient commercial building property placed in service during the tax year or (2) the product of $1.80 and the square footage of the building, reduced by all deductions claimed with respect to the building in any prior tax years.

In order to qualify as "energy-efficient commercial building property," several criteria must be met. First, the costs must be associated with depreciable or amortizable property that is installed in a domestic building that is within the scope of Standard 90.1-2001 of the American Society of Heating, Refrigerating, and Air Conditioning Engineers and the Illuminating Engineering Society of North America (as in effect on April 2, 2003). Second, the property in question must be installed as part of: (1) the interior lighting system, (2) the heating, cooling, ventilation and hot water systems, or (3) the building envelope. Third, the property must be installed pursuant to a plan intended to reduce the total annual energy and power costs of the building (with respect to interior lighting, heating, cooling, ventilation and hot water supply systems) by 50% or more in comparison to a reference building that meets the minimum requirements of Standard 90.1-2001.

Note finally, that the basis or the depreciable cost of any property generating a deduction must be reduced by the amount deducted. Thus, depreciation may not be claimed on any amount that is deducted under the provision.

A qualified professional must certify that the property reduces the total annual energy and power costs of the building's heating, cooling, ventilation, hot water, and interior lighting systems by 50% or more when compared to a similar reference building that meets minimum specified energy standards described in Standard 90.1-2001, Energy Standard for Buildings Except Low-Rise Residential Buildings, of the American Society of Heating, Refrigerating, and Air Conditioning Engineers and the Illuminating Engineering Society of North America. If the overall 50% energy reduction standard is not satisfied, but improvements to one of the three energy efficient commercial building property types described above reduce energy usage by 16 2/3%, then the cost of the improvements to that particular subsystem may also be deducted in the tax year placed in service, but the deduction is limited to 60¢ per square foot of building space less total deductions claimed in prior tax years.

The taxpayer must receive a certificate with respect to the property before the deduction may be claimed. The required certification, which includes a statement that the applicable energy reduction requirement has been satisfied, must be provided by a professional engineer or contractor who is unrelated to the taxpayer and has represented in writing to the taxpayer that he or she has the qualifications necessary to provide the certification. The engineer or contractor must be licensed in the jurisdiction in which the building is located. The certification must also include a statement that field inspections conducted after the building was placed in service confirm that the building has met, or will meet, the energy-savings targets. The certification must include a list identifying the components of the interior lighting systems, heating, cooling, ventilation, and hot water systems, and building envelope installed on or in the building, the energy efficiency features of the building, and its projected annual energy costs. This list may

aid in the identification of the property that qualifies for the deduction. However, the list is not required to specify the cost of the property. This information may need to be obtained separately from the contractor or a cost segregation study. The certification need not be included with the taxpayer's return but should be retained.

Qualification for the deduction for energy efficiency improvements to commercial buildings also requires calculation of energy savings attributable to the interior lighting systems, heating, cooling, ventilation, and hot water systems, and building envelope. The energy savings calculations must be made using IRS approved software that utilizes the performance rating method.[14] The energy-efficient commercial building deduction is claimed by the person who is entitled to depreciate the property (e.g., the owner of the building or a lessee who pays for and installs the property). Also, under IRS regulations, if more than one taxpayer installs qualifying property on or in the same building, the aggregate amount of deductions claimed by all taxpayers may not exceed the limit based on square footage.[15] However, in the case of a federal, State, or local government building — in which case the owners of such buildings are tax-exempt entities and cannot therefore benefit from tax incentives — the person who designs the energy efficient commercial building property may claim the deduction (IRC § 179D(d)(4)). Improvements to a tax-exempt property (other than a government building), such as a church, which is not depreciable, do not qualify for the deduction. Improvements to a residential rental building qualify for the deduction if it has four or more stories above ground level.

Impact

In general the types of commercial energy property that qualify for the deduction are part of a businesses' assets, and hence are depreciable in accordance with the guidelines established by law and regulation, which vary by type of business. Under current depreciation rules (the Modified Accelerated Cost Recovery System), structures and structural components — such as heating/cooling systems and lighting — are depreciated over 39 years using the straight line method. Allowing a current deduction for energy efficient capital goods that would otherwise be depreciated over such a long period of time — that is, allowing expensing of the costs of such property — greatly accelerates, and increases the present value of, the deductions. This

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[14]A list of approved software programs is located on the U.S. Department of Energy's Web Site at:
http://www.eere.energy.gov/buildings/info/tax_credit_2006.html.

[15]Internal Revenue Service. Notice 2006-52, Section 2.02(2). *Internal Revenue Bulletin*. June 26, 2006.

reduces effective tax rates and would normally encourage investment. However, this deduction is in place for a relatively short period of time, just over 2 years, and given the 1) long lead time for constructing commercial buildings, and 2) complexity of determining the deduction, there is some question of its effectiveness in inducing investment in qualifying property.

Rationale

This deduction was introduced by the Energy Policy Act of 2005 (P.L. 109-58), to encourage businesses to retrofit their commercial buildings with energy conserving components and equipment. The goal was to enhance the energy efficiency of commercial buildings. The Energy Tax Act of 1978 (P.L. 96-518) provided for a 10 percent investment tax credit for certain categories of property that conserved energy in industrial processes, which generally applied to the manufacturing and agricultural sectors. These types of property — there were actually 13 categories — were called specially defined energy property, but none included property for conserving energy in commercial buildings. These credits generally expired at the end of 1982. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) extended this deduction by one year.
The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended it through December 31, 2013.

Assessment

Commercial buildings include a wide variety of building types — such as offices, hospitals, schools, police stations, places of worship, warehouses, hotels, barber shops, libraries, and shopping malls. These different commercial activities all have unique energy needs but, as a whole, commercial buildings use more than half their energy for heating and lighting. Electricity and natural gas are the most common energy sources used in commercial buildings, accounting for 90 percent of total commercial sector energy use. The commercial sector in the United States uses almost as much energy as the residential sector but has not generally been the target of energy conservation incentives. As noted above, the (now expired) energy tax credits of 1978 targeted the industrial energy sector.

There is no generally acknowledged market failure in the use of energy in commercial buildings or the production and investment in energy using/saving capital goods in such buildings that requires government intervention via subsidies. The business profit maximizing (and cost minimizing) objective is generally sufficient to invest in energy-saving capital when the rate of return on such investments is above the opportunity cost. From an economic perspective, allowing special tax benefits for certain types of investment or consumption can result in a misallocation of resources. The deduction under IRC § 179D might be justified on the

grounds of conservation, if consumption of energy resulted in negative effects on society, such as pollution. In general, however, it would be more economically efficient to directly tax energy fuels than to subsidize a particular method of achieving conservation.

There may be a market failure in tenant-occupied homes, if the tenant pays for electricity separately. In rental housing, the tenant and the landlord lack strong financial incentives to invest in energy conservation equipment and materials, even when the benefits clearly outweigh the costs, because the benefits from such conservation may not entirely accrue to the party undertaking the energy-saving expenditure and effort. Builders and buyers may also lack sufficient information, a problem which is discussed below.

As a general rule, tenants are not going to improve the energy efficiency of a residence that does not belong to them, even if the unit is metered. They sometimes make such improvements if the rate of return (or payback) is sufficiently large, but most tenants do not occupy rental housing long enough to reap the full benefits of the energy conservation investments. Part of the problem is also that it is not always easy to calculate the energy savings potential (hence rates of return) from the various retrofitting investments. Landlords may not be able to control the energy consumption habits of renters to sufficiently recover the full cost of the energy conservation expenditures, regardless of whether the units are individually metered. If the units are individually metered, then the landlord would generally not undertake such investments since all the benefits therefrom would accrue to the renters, unless a landlord could charge higher rents on apartments with lower utility costs. If the units are not individually metered, but under centralized control, the benefits of conservation measures may accrue largely to the landlord, but even here the tenants may have sufficient control over energy use to subvert the accrual of any gains to the landlord. In such cases, from the landlord's perspective, it may be easier and cheaper to forgo the conservation investments and simply pass on energy costs as part of the rents. Individual metering can be quite costly, and while it may reduce some of the distortions, it is not likely to completely eliminate them, because even if the landlord can charge higher rents, he may not be able to recover the costs of energy conservation efforts or investments.

These market failures may lead to underinvestment in conservation measures in rental housing and provide the economic rationale for gross income exclusion under Internal Revenue Code (IRC) §136, as discussed elsewhere in this compendium. Without such explicit exclusion, such subsidies would be treated as gross income and subject to tax. This exclusion, however, applies both to owner-occupied and to rental housing.

Selected Bibliography

American Council for and Energy Efficient Economy. *The Size of the U.S. Energy Efficiency Market, ACEEE.* May 2008.

Brown, Marilyn. "Market Failures and Barriers as a Basis for Clean Energy Policies," *Energy Policy*, v. 29. November 2001, pp. 1197-1207.

Fisher, Anthony C., and Michael H. Rothkopf. "Market Failure and Energy Policy: A Rationale for Selective Conservation," *Energy Policy*, v. 17. August 1989, pp. 397-406.

Hahn, Robert W. "Energy Conservation: An Economic Perspective." American Enterprise Institute, October 2005.

Hassett, Kevin A., and Gilbert E. Metcalf. "Energy Conservation Investment: Do Consumers Discount the Future Correctly?" *Energy Policy*, v. 21. June 1993, pp. 710-716.

Howarth, Richard B. and Bo Anderson. "Market Barriers to Energy Efficiency." *Energy Economics,* October, 1993. pp. 262-292.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: July 28, 2006.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

Loskamp, Wendy. "Energy, Water Efficiencies and Savings Come From Meter Data Management." Energy Pulse. *Insight Analysis and Commentary on the Global Power Industry.* 2006

Metcalf, Gilbert E. "Economics and Rational Conservation Policy." *Energy Policy*, v. 22. October 1994, pp. 819-825.

National Science and Technology Council. *Net-Zero, High-Performance Green Buildings.* October 2008.

Sutherland, Ronald J. "Energy Efficiency or the Efficient Use of Energy Resources." *Energy Sources*, v. 16, pp. 257-268.

_. "The Economics of Energy Conservation Policy." *Energy Policy*, v. 24. April 1996, pp. 361-370.

U.S. Congress. House. Committee on Energy and Commerce. *National Energy Policy: Conservation and Energy Efficiency.* Hearings Before the Subcommittee on Energy and Air Quality. Washington, DC: U.S. Government Printing Office, June 22, 2001.

U.S. Department of Energy. Lawrence Berkeley National Laboratory. "Energy Efficiency, Market Failures, and Government Policy." Levine, Mark D., et al. March 1994.

_. Energy Information Administration. *1999 Commercial Buildings Energy Consumption Survey — Commercial Buildings Characteristics.* May 2006.

_. Energy Information Administration. *2003 Commercial Buildings Energy Consumption Survey — Overview of Commercial Buildings Characteristics.* May 2002.

_. *Monthly Energy Review.* October 2006.

U.S. Department of Treasury. Internal Revenue Service. "Deduction for Energy Efficient Commercial Buildings." *Internal Revenue Bulletin.* Notice 2006-52, June 26, 2006.

DEFERRAL OF GAIN FROM THE DISPOSITION OF ELECTRIC TRANSMISSION PROPERTY TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION RESTRUCTURING POLICY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.3	0.3
2009	([1])	0.2	0.2
2010	([1])	([1])	([1])
2011	([1])	-0.1	-0.1
2012	([1])	-0.1	-0.1

([1]) Negative tax expenditure of less than $50 million.

Authorization

Section 451.

Description

Section 451(i) permits taxpayers to elect to recognize any capital gain from the sale of qualifying electricity transmission property to an independent transmission company (ITC), pursuant to a Federal Energy Regulatory Commission (FERC) restructuring policy, evenly over eight years beginning with the year of the sale. The sale proceeds must be reinvested in other electricity assets within four years. This special tax incentive is available for sales through December 31, 2009.

Impact

Generally, any gain realized from a sale or disposition of a capital asset is recognized in the tax year in which the gain was realized, unless there is a specific exemption or deferral — a taxpayer selling property recognizes any profits for tax purposes in the year of the sale. The recognition of gain over eight years, rather than in the year of sale, is a deferral, rather than a complete forgiveness, of tax liability — it is a delay in the recognition of income, hence in the payment of tax. The economic benefit derives from the reduction in the present value of the tax owed below what the tax would otherwise be if it were required to be recognized in the year of sale. Transmission property is also depreciated over 15 years, which means that depreciation deductions are taken somewhat faster than economic depreciation. This lowers effective tax rates on the return to such investments.

Rationale

The deferral of gain on the sale of transmission assets was enacted in order to encourage energy transmission infrastructure reinvestment and assist those in the industry who are restructuring. It is intended to foster a more competitive industry by facilitating the unbundling of transmission assets held by vertically integrated utilities. Under restructuring, States and Congress have considered rules requiring the separate ownership of generation and distribution and transmission assets. However, vertically integrated electric utilities still own a large segment of the nation's transmission infrastructure. The tax provision encourages the sale of transmission assets by vertically integrated electric utilities — the unbundling of electricity assets — to independent system operators or regional transmission organizations, who would own and operate the transmission lines. The provision is intended to improve transmission management and service, and facilitate the formation of competitive electricity markets. Without this incentive, any gain from the forced sale of transmission assets, pursuant to a FERC (or other regulatory body) restructuring policy would be taxed as ordinary income (i.e., at the highest rates) all in the year of sale.

This provision is intended to promote restructuring of the electric utility industry away from the traditional monopoly structure and toward increased competition. The incentive was introduced as part of the energy tax provisions in comprehensive energy legislation; it was enacted as part of the American Jobs Creation Act of 2004 (P.L. 108-357). The Energy Policy Act of 2005 (P.L. 109-58) extended deferral treatment from December 31, 2006, to December 31, 2007. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the present law deferral to December 31, 2009.

Assessment

The restructuring of the electric power industry has, and may continue to result in significant reorganization of power assets. In particular, it may result in a significant disposition of transmission assets and possibly, depending on the nature of the transaction, trigger an income tax liability and interfere with industry restructuring. Under an income tax system, the sale for cash of business assets subject to depreciation deductions triggers a tax on taxable income in the year of sale to the extent of any gain. Corporations pay capital gains on sales of capital assets, such as shares of other corporations. But gains on the sale of depreciable assets involve other rules. For example, sales of personal property, such as machinery, are taxed partly as capital gains and partly as ordinary income. The overall taxable amount is the difference between the sales price and basis, which is generally the original cost minus accumulated depreciation. That amount is taxed as ordinary income to the extent of previous depreciation allowances (depreciation is "recaptured").

Selected Bibliography

Abel, Amy. *Electric Transmission: Approaches to Energizing a Sagging Industry.* Library of Congress. Congressional Research Service Report RL33875. Washington, DC: January 30, 2008.

_. *Electric Reliability: Options for Electric Transmission Infrastructure Improvements.* Library of Congress. Congressional Research Service Report RL32075. Washington, DC: September 20, 2006.

Abel, Amy. *Energy Policy Act of 2005, P.L. 109-58: Electricity Provisions*. Congressional Research Service Report RL33248. Washington, DC: January 24, 2006.

Boyce, John R. and Aidan Hollis. "Governance of Electricity Transmission Systems." *Energy Economics,* v. 27, March 2005.

Davie, Bruce F. and Dennis Zimmerman. "Financing Social and Environmental Policy Objectives in a Restructured Electricity Industry." Paper Prepared for the National Tax Association 92nd Annual Conference on Taxation. October 24-26, 1999.

Desai, Mihir and William Gentry. "The Character and Determinants of Corporate Capital Gains," *The National Bureau of Economic Research*, NBER Working Paper #w10153, December 2003.

Jaccard, Mark. " The Changing Rationale for Government Intervention in the Electric Utility Industry." *Energy Policy*, v. 23. July 1995. pp. 579-592.

Joskow, Paul L. "Competitive Electricity Markets and Investment in New Generating Capacity," *MIT Research Paper*. April, 28, 2006.

_. *Transmission Policy in the United States.* AEI-Brookings Joint Center for Regulatory Studies. October 2004.

_. "Restructuring, Competition, and Regulatory Reform in the U.S. Electricity Sector," *Journal of Economic Perspectives*. Summer 1997. pp.

119-138. U.S. Congress, Joint Committee on Taxation. *Federal Tax Issues Relating to Restructuring of the Electric Power Industry.* Hearing before the Subcommittee on Long-Term Growth and Debt Reduction of the Senate Finance Committee, October 15, 1999. JCX 72-99.

Vogelsang, Ingo. "Electricity Transmission Pricing and Performance-based Regulation." *Energy Journal*, v.27, 2006, pp. 97-127.

DEPRECIATION RECOVERY PERIODS FOR SPECIFIC ENERGY PROPERTY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	0.3	0.4
2009	[1]	0.3	0.3
2010	[1]	0.3	0.3
2011	[1]	0.4	0.4
2012	[1]	0.4	0.4

[1] Less than $50 million.

Authorization

Section 168(e).

Description

Under the Modified Accelerated Cost Recovery System (MACRS), the cost of tangible depreciable property (capital goods) placed in service after 1986 is recovered using (1) the applicable depreciation method, (2) the applicable recovery period, and the applicable convention. The recovery period for selected types of renewable energy equipment — solar, wind, geothermal and ocean thermal, and biomass property that is part of a "small electric power facility" — is recovered over 5 years. Certain electric transmission property and natural gas pipelines originally placed in service after April 11, 2005, is MACRS property recovered over 15-years. A qualified smart meter or qualified smart electric grid system (which are essentially energy monitoring and management devices) is recovered over 10 years.

In addition to the depreciation benefits discussed in this item, several other tax benefits are available. The generation of electricity from certain types of renewable resources — qualified wind energy, "closed-loop" biomass, geothermal, solar (only for pre-2006 facilities), and others — is also allowed a production tax credit at the rate of 2.1¢ per kilowatt-hour of electricity produced in 2008. Business investment in solar and geothermal energy equipment, small commercial wind turbines, fuel cells, microturbines, and combined heat and power systems also qualifies for an investment tax credit at varying rates: The credit is 30% for solar and fuel cell equipment, and 10% for geothermal and microturbine energy equipment, as well as for geothermal heat pumps, small commercial wind turbines, and combined heat and power systems. Finally, tax credits are also provided to homeowners that invest in selected types of renewable energy equipment: a 30% credit, not to exceed $2,000, is provided for home owners that purchase and install photovoltaic property used exclusively for residential purposes; a separate 30% credit is provided for residential solar water heating property other than property heating swimming pools and hot tubs; and a 30% tax credit is provided for small wind systems, limited to $4,000, and for geothermal heat pumps, limited to $2,000.

Impact

A more beneficial depreciation method produces a tax subsidy that can be measured in different ways. One way is to express it as a percentage reduction in the cost. Based on a 5% real rate of return and a 2% inflation rate, the present value of 5, 10, 15, and 20-year depreciation per dollar of investment is, respectively $0.87, $0.77, $0.64, and $0. 57. The differences between the 5, 10, and 15 year periods and the 20-year period is the difference between values multiplied by the tax rate. Using a 35% tax rate, these depreciation periods confer a reduction in the cost of acquiring the property of 11% for 5-year property, 7% for 10-year property, and 3% for 15 year property. The benefits can also be expressed as effective tax rates (the difference between the pre-tax required return on the investment and the after tax return). Assuming an economic depreciation rate of 3% and an equity financed investment, the effective tax rate using a 20-year life is 27%; for a 5-year life it is 10%, for a 10-year life, 17%, and for a 15 year life, 23%. Other types of subsidies in the tax law, as discussed above, would further reduce effective tax rates, and could produce negative tax rates (net subsidies) or even negative investment returns before tax subsidies.

Rationale

The Tax Reform Act of 1986 (P.L. 99-514) assigned a 5-year recovery period to solar, wind, geothermal and ocean thermal, and biomass property that is part of a small electric power facility. This assignment was part of a major depreciation revision, and no specific justification for this change was provided, although it was presumably to encourage alternative energy sources that are less polluting than conventional fuels. The Energy Policy Act of 2005 (P.L. 109-58) reduced the recovery period for certain electric transmission property and natural gas distribution lines from 20 years to 15 years; no specific rationale was provided. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) shortened the depreciation recovery period for smart electric meters and smart electric grid equipment from 20 years to 10 years.

Assessment

Economic theory suggests that capital investments should be treated in a neutral fashion to maximize economic well being. Some justifications may exist for favoring renewable energy resources on environmental grounds. There is no obvious reason that the price of refined liquids should be subsidized, even for a temporary time. There are pollution, congestion, and other external negative effects of the consumption of petroleum products that might suggest the reverse of a subsidy.

Selected Bibliography

Abel, Amy. *Smart Grid Provisions in H.R. 6, 110th Congress*. Library of Congress, Congressional Research Service Report RL34288. Washington, DC: February 13, 2008.

Chirinko, Robert S., Steven M. Fazzarri, and Andrew P. Meyer. "How Responsive is Business Capital Formation to its User Cost? An Exploration with Micro Data?" *Journal of Public Economics* vol. 74 (1999), pp. 53-80.

Cummins, Jason G. , Kevin A. Hassett, and R. Glen Hubbard, "A Reconsideration of Behavior Using Tax Reforms as Natural Experiments." *Brookings Papers on Economic Activity*, 1994, no. 1, pp. 1-72.

Gravelle, Jane. *Economic Effects of Taxing Capital Income.* MIT Press, 1994.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: September 22, 2008.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL30406. Washington, DC: June 28, 2005.

EXCEPTION FOR PUBLICLY TRADED PARTNERSHIPS WITH QUALIFIED INCOME DERIVED FROM CERTAIN ENERGY RELATED ACTIVITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.4	—	0.4
2009	0.4	—	0.4
2010	0.5	—	0.5
2011	0.6	—	0.6
2012	0.6	—	0.6

Authorization

Section 7704

Description

Code Sec. 7704, with a noteworthy exception, generally treats a publicly traded partnership (PTP) as a corporation for federal income tax purposes. For this purpose, a PTP is any partnership that is traded on an established securities market or secondary market.

A notable exception to Sec. 7704 occurs if 90 percent of the gross income of a PTP is passive-type income, such as interest, dividends, real property rents, gains from the disposition of real property, and similar income or gains. In these cases, the PTP is exempt from corporate level taxation, thus allowing it to claim pass-through status for tax purposes.

Qualifying income includes interest, dividends, real property rents, gain from the disposition of real property, income and gains from certain natural resource activities, gain from the disposition of a capital asset (e.g., selling stock), or certain property held for the production of income, as well as

certain income and gains from commodities. In addition, gains related to the marketing of certain alternative fuels are treated as qualifying income for publicly traded partnerships. Qualifying income does not include income derived from the production of power, or trading and investment activity.

Impact

In general, publicly traded partnerships favor the owners of publicly traded partnerships whose main source of qualifying income is from energy related activities. In contrast to an otherwise similar corporation, the owners of such a publicly traded partnership are not subject to a corporate level tax. In addition, the owners of PTPs benefit from deferral of income distributed by the PTP.

Rationale

The rules generally treating publicly traded partnerships as corporations were enacted by the Revenue Act of 1987 (P.L. 100-203) to address concern about erosion of the corporate tax base through the use of partnerships. Congress's concern was that growth in PTPs signified that activities that would otherwise be conducted by corporations, and subject to both corporate and shareholder level taxation, were being done by PTPs for purely tax reasons — eroding the corporate tax base.

The Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647) clarified the definition of qualified income to include income from the transport of oil and gas and from depletable natural resources. Income from the marketing of oil and gas to retail customers was excluded from qualified income. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) expands the definition of qualified income to include income or gains from the transport or storage of certain biofuels.

Assessment

The fundamental issue, from a matter of tax policy, is whether some PTPs should be exempt from corporate level taxation, based upon the nature and type of their income. In general, Congress has enacted rules that limit the ability of untaxed entities to publicly trade their interests and/or restrict the entities activities. Thus, the exemption of some PTPs from corporate level taxes may be seen as a departure from general Congressional intent concerning passthrough entities. Others would argue that the types of qualifying income listed in statute are sufficient justification for the passthrough treatment.

Selected Bibliography

Gentry, William M., "Taxes, Financial Decisions and Organizational Form: Evidence from Publicly Traded Partnerships," *Journal of Public Economics,* vol. 53, no. 2, (1994), pp.223-244.

Martin, John D., and John W. Kensinger, "Valuation Effects of Rollout Publicly Traded Partnerships in the Oil and Gas Industry," *Managerial and Decision Economics*, vol. 11, no. 3, (1990), pp. 143-153.

Schisler, Dan L. and James M. Lukawitz. "The Impact of the Omnibus Budget Reconciliation Act of 1987 on Shareholders of Publicly Traded Partnerships," *Advances in Taxation,* vol. 7, (1995), pp.141-159.

U.S. Congress, House Committee on the Budget, *Omnibus Budget Reconciliation Act of 1987*, 100th Cong., 1st sess., October 26, 1987 (Washington, GPO, 1987).

U.S. Congress, Joint Committee on Taxation**.** *Present Law and Analysis Relating to Tax Treatment of Partnership Carried Interest and Related Issues, Part I.* JCX-62-07, 110th Congress, 1st Session. (Washington, D.C., GPO, 2007), p. 40.

EXCESS OF PERCENTAGE OVER COST DEPLETION: OIL, GAS, AND OTHER FUELS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals		Corporations		Total	
	Oil and Gas	Other Fuels	Oil and Gas	Other Fuels	Oil and Gas	Other Fuels
2008	([1])	([1])	1.3	0.1	1.3	0.1
2009	([1])	([1])	1.4	0.1	1.4	0.1
2010	([1])	([1])	1.4	0.1	1.4	0.1
2011	([1])	([1])	1.4	0.1	1.4	0.1
2012	([1])	([1])	1.4	0.1	1.4	0.1

([1]) Positive tax expenditure of less than $50 million.

Authorization

Sections 611, 612, 613, 613A, and 291.

Description

Firms that extract oil, gas, or other minerals are permitted a deduction to recover their capital investment in a mineral reserve, which depreciates due to the physical and economic depletion or exhaustion as the mineral is recovered (section 611). Depletion, like depreciation, is a form of capital recovery: An asset, the mineral reserve itself, is being expended in order to produce income. Under an income tax, such costs are deductible.

There are two methods of calculating this deduction: cost depletion and percentage depletion. Cost depletion allows for the recovery of the actual capital investment — the costs of discovering, purchasing, and developing a mineral reserve — over the period during which the reserve produces income. Each year, the taxpayer deducts a portion of the adjusted basis

(original capital investment less previous deductions) equal to the fraction of the estimated remaining recoverable reserves that have been extracted and sold. Under this method, the total deductions cannot exceed the original capital investment.

Under percentage depletion, the deduction for recovery of capital investment is a fixed percentage of the "gross income" — *i.e.*, revenue — from the sale of the mineral. Under this method, total deductions typically exceed, despite the limitations, the capital invested to acquire and develop the reserve.

Section 613 states that mineral producers must claim the higher of cost or percentage depletion. The percentage depletion rate for oil and gas is 15% and is limited to average daily production of 1,000 barrels of oil, or its equivalent in gas, and only for wells located in the United States. For producers of both oil and gas, the limit applies on a combined basis. For example, an oil producing company with 2006 oil production of 100,000 barrels, and natural gas production of 1.2 billion cubic feet (the equivalent of 200,000 barrels of oil) has average daily production of 821.92 barrels (300,000 ÷ 365 days). Percentage depletion is not available to integrated major oil companies — it is available only for independent producers and royalty owners. An independent producer is one that does not have refinery operations that refine more than 75,000 barrels of oil per day, and does not have retail oil and gas operations grossing more than $5 million per year. Beginning in 1990, the percentage depletion rate on production from marginal wells — oil from stripper wells (those producing no more than 15 barrels per day, on average), and heavy oil — was raised. This rate starts at 15% and increases by one percentage point for each whole $1 that the reference price of oil for the previous calendar years is less than $20 per barrel (subject to a maximum rate of 25%). This higher rate is also limited to independent producers and royalty owners, and for up to 1,000 barrels, determined as before on a combined basis (including non-marginal production). However, for 2007, high market crude oil prices limited the percentage depletion rate to 15%. Small independents operate about 400,000 small stripper wells in about 28 States, which produce about 1 million barrels of marginal oil/day, about 20% of domestic production.

Percentage depletion is limited to 65% of the taxable income from all properties for each producer. However, beginning on January 1, 2009, this limitation is suspended for one year, but only for marginal properties A second limitation is the 100% net-income limitation, which applies to each individual property rather than to all the properties. From 1998-2007, the 100% net-income limitation was also suspended for marginal production. Since 1990, transferred properties have been eligible for percentage depletion. The difference between percentage depletion and cost depletion is considered a subsidy. It was once a tax preference item for purposes of the alternative minimum tax, but this was repealed by the Energy Policy Act of 1992 (P.L. 102-486).

The percentage depletion allowance is available for many other types of fuel minerals, at rates ranging from 10% (coal, lignite) to 22% (uranium). The rate for regulated natural gas and gas sold under a fixed contract is 22%; the rate for geo-pressurized methane gas is 10%. Oil shale and geothermal deposits qualify for a 15% allowance. The net-income limitation to percentage depletion for coal and other fuels is 50%, as compared to 100% for oil and gas. Under code section 291, percentage depletion on coal mined by corporations is reduced by 20% of the excess of percentage over cost depletion.

Impact

Historically, generous depletion allowances and other tax benefits reduced effective tax rates in the fuel minerals industry significantly below tax rates on other industries, which provided additional incentives to increase investment, exploration, and output, especially of oil and gas. Oil and gas output, for example, rose from 16% of total U.S. energy production in 1920 to 71.1% in 1970 (the peak year).

The combination of this subsidy and the deduction of intangible drilling and other costs (see previous entry) represented a significant boon to mineral producers who were eligible for both. The deduction of intangible drilling costs allows up to three-quarters of the original investment to be "written off" immediately, and under the percentage depletion allowance a portion of gross revenues can be written off for the life of the investment. It was possible for cumulative depletion allowances to total many times the amount of the original investment.

The 1975 repeal of percentage depletion for the major integrated oil companies, and declining oil production, means that the value of this tax subsidy has been greatly reduced in the last 30 years. The reduction in the depletion allowance to 15% in 1984 means that independent producers benefit from it much less than they used to, although independents have increased their share of total output, and they qualify for the higher depletion rate on marginal production. Most recently, high oil and gas prices may have raised somewhat the subsidy value of percentage depletion to the independents. In addition, cutbacks in other tax benefits and additional excise taxes have raised effective tax rates in the mineral industries, although independent oil and gas producers continue to be favored. However, the exemption for working interests in oil and gas from the passive loss limitation rules still creates opportunities for tax shelters in oil and gas investments. This rule allows losses incurred from exploring for and producing oil and gas to offset ordinary non-oil and gas income.

Undoubtedly, these cutbacks in percentage depletion contributed to the decline in domestic oil production, which peaked in 1970 and recently dropped to a 30-year low. Percentage depletion for other mineral deposits

was unaffected by the 1975 legislation. Nevertheless, in an average year more than half the percent revenue loss is a result of oil and gas depletion. The value of this expenditure to the taxpayer is the amount of tax savings that results from using the percentage depletion method instead of the cost depletion method.

Percentage depletion has little, if any, effect on oil prices, which are determined by supply and demand in the world oil market. However, it may encourage higher prices for drilling and mining rights.

Rationale

Provisions for a mineral depletion allowance based on the value of a mine were made under a 1912 Treasury Department regulation (T.D. 1742) but were never implemented. A court case resulted in the enactment, as part of the Tariff Act of 1913, of a "reasonable allowance for depletion" not to exceed 5% of the value of mineral output. Treasury regulation No. 33 limited total deductions to the original capital investment.

This system was in effect from 1913 to 1918, although in the Revenue Act of 1916, depletion was restricted to no more than the total value of output, and in the aggregate no more than capital originally invested or fair market value on March 1, 1913 (the latter so that appreciation occurring before enactment of income taxes would not be taxed).

The 1916 depletion law marked the first time that the tax laws mentioned oil and gas specifically. On the grounds that the newer discoveries that contributed to the war effort were treated less favorably, discovery value depletion was enacted in 1918. Discovery depletion, which was in effect through 1926, allowed deductions in excess of capital investment because it was based on the market value of the deposit after discovery. Congress viewed oil and gas as a strategic mineral, essential to national security, and wanted to stimulate the wartime supply of oil and gas, compensate producers for the high risks of prospecting, and relieve the tax burdens of small-scale producers.

In 1921, because of concern with the size of the allowances, discovery depletion was limited to net income; it was further limited to 50% of net income in 1924. Due to the administrative complexity and arbitrariness of the method, and due to its tendency to establish high discovery values, which tended to overstate depletion deductions, discovery value depletion was replaced in 1926 by the percentage depletion allowance, at the rate of 27.5%.

In 1932, percentage depletion was extended to coal and most other minerals. In 1950, President Truman recommended that the depletion rate be reduced to 15%, but Congress disagreed. In 1969, the top depletion rates

were reduced from 27.5% to 22%, and in 1970 the allowance was made subject to the minimum tax.

The Tax Reduction Act of 1975 eliminated the percentage depletion allowance for major oil and gas companies and reduced the rate for independents to 15% for 1984 and beyond. This was in response to the Arab oil embargo of 1973-74, which caused oil prices to rise sharply. The continuation of percentage depletion for independents was justified by Congress on the grounds that independents had more difficulty in raising capital than the major integrated oil companies, that their profits were smaller, and that they could not compete with the majors.

The Tax Equity and Fiscal Responsibility Act of 1982 limited the allowance for coal and iron ore. The Tax Reform Act of 1986 denied percentage depletion for lease bonuses, advance royalties, or other payments unrelated to actual oil and gas production.

The Omnibus Budget and Reconciliation Act of 1990 introduced the higher depletion rates on marginal production, raised the net income limitation from 50% to 100%, and made the allowance available to transferred properties. These liberalizations were based on energy security arguments. The Energy Policy Act of 1992 repealed the minimum tax on percentage depletion. The Taxpayer Relief Act of 1997 suspended the 100% taxable income limitation for marginal wells for two years, and further extensions were made by the Ticket to Work and Work Incentives Improvement Act of 1999 and the Job Creation and Worker Assistance Act of 2002. The Working Families Tax Relief Act of 2004 retroactively suspended the 100% net-income limitation through December 31, 2005. The Energy Policy Act of 2005 (P.L. 109-58) increased the per-day limitation on refining, for purposes of determining who is an independent producer, from 50,000 barrels per day to 75,000 barrels per day. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) extended the suspension of the 100% net-income limitation through 2007. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the 65% taxable-income limitation for marginal properties by one year, beginning on January 1, 2008.

Assessment

Standard accounting and economic principles state that the appropriate method of capital recovery in the mineral industry is cost depletion adjusted for inflation. The percentage depletion allowance permits independent oil and gas producers, and other mineral producers, to continue to claim a deduction even after all the investment costs of acquiring and developing the property have been recovered. Thus it is a mineral production subsidy rather than an investment subsidy.

As a production subsidy, however, percentage depletion is economically inefficient. It incorrectly measures the income of qualifying independent oil and gas producers, and it encourages excessive development of existing properties — the source of the depletion benefit — over exploration for new ones, which will not produce a flow of depletion benefits until actual output results. This tax treatment contrasts with capital subsidies, such as accelerated depreciation for non-mineral assets. Although accelerated depreciation may lower effective tax rates by speeding up tax benefits, these assets cannot be used for depreciation deductions in excess of investment.

Percentage depletion for oil and gas subsidizes independent producers that are primarily engaged in exploration and production. To the extent that it stimulates oil production, it reduces dependence on imported oil in the short run, but it contributes to a faster depletion of the Nation's resources in the long run, which may increase long-term oil import dependence. Arguments have been made over the years to justify percentage depletion on grounds of unusual risks, the distortions in the corporate income tax, national security, uniqueness of oil as a commodity, the industry's lack of access to capital, and protection of small producers.

Volatile oil prices make oil and gas investments more risky, but this would not necessarily justify percentage depletion or other tax subsidies. The corporate income tax does have efficiency distortions, but from an economic perspective income tax integration may be a more appropriate policy to address this problem.

To address national security concerns, one alternative is an oil stockpile program such as the Strategic Petroleum Reserve.

Selected Bibliography

Congressional Budget Office. Budget Options. Section 31: Curtail Income Tax Preferences for Businesses and Other Entities. February 2001.

Edmunds, Mark A. "Economic Justification for Expensing IDC and Percentage Depletion Allowance," *Oil & Gas Tax Quarterly*, v. 36. September 1987, pp. 1-11.

Energy Information Administration. Accelerated Depletion: Assessing the Impact on Domestic Oil and Natural Gas Prices and Production. SR/OIAF/2000-04. July 2000.

Fenton, Edmund D. "Percentage Depletion, RMFP, and the Exxon Cases," *Oil and Gas Tax Quarterly*, v.52. September 2003, pp. 1-17.

Frazier, Jessica, and Edmund D. Fenton. "The Interesting Beginnings of the Percentage Depletion Allowance," *Oil and Gas Tax Quarterly*, v. 38. June 1990, pp. 697-712.

Ghiselin, Dick. "Drilling Economics" *Oil and Gas Investor,* December 2005, pp.13-22.

Gravelle, Jane G. "Effective Federal Tax Rates on Income from New Investments in Oil and Gas Extraction," *The Energy Journal*, v.6. 1985, pp. 145-153.

Harberger, Arnold G. *Taxation and Welfare*. Chicago: Univ. of Chicago Press, 1974, pp. 218-226.

Hennessee, Patrick A. Percentage Depletion — How Natural Gas Producers Can Avoid the Retailer Exclusion of 613A. *The Journal of Taxation.* July 2005, pp. 39-46.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service, CRS Report RL33578. Washington, DC: Updated September 22, 2008.

— . *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service, Report RL 30406. Washington, DC: June 28, 2005.

Lucke, Robert, and Eric Toder. "Assessing the U.S. Federal Tax Burden on Oil and Gas Extraction," *The Energy Journal*, v. 8. October 1987, pp. 51-64.

Lyon, Andrew B. "The Effect of Changes in the Percentage Depletion Allowance on Oil Firm Stock Prices," *The Energy Journal*, v.10. October 1989, pp.101-116.

McDonald, Stephen L. *Federal Tax Treatment of Income from Oil and Gas.* The Brookings Institution, 1963.

Rook, Lance W. "The Energy Policy Act of 1992 Changes the Effect of the AMT on Most Oil Producers," *Tax Advisor*, v. 24. August 1993, pp. 479-484.

Thomas, Christopher, S. Charles Maurice, D. Larry Crumbley. Vertical Integration, Price Squeezing, and Percentage Depletion Allowance. *The Quarterly Review of Economics and Business*, v. 29. Winter 1989, pp26-37.

U.S. General Accounting Office. *Additional Petroleum Production Tax Incentives Are of Questionable Merit*, GAO/GGD-90-75. Washington, DC: July 1990.

U.S. Treasury Department. *Tax Reform for Fairness, Simplicity, and Economic Growth*, v. 2. Washington, DC: November 1984, pp. 229-231.

U.S. Treasury Department. Internal Revenue Service. *IRS Audit Guide: Oil and Gas Industry, Market Segmentation Specialization Program.* 2006.

EXCLUSION OF ENERGY CONSERVATION SUBSIDIES PROVIDED BY PUBLIC UTILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	-	([1])
2009	([1])	-	([1])
2010	([1])	-	([1])
2011	([1])	-	([1])
2012	([1])	-	([1])

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 136.

Description

Gross income does not include the value of any subsidy provided (directly or indirectly) by a public utility to a customer for the purchase or installation of any energy conservation measure. An energy conservation measure is any installation or modification primarily designed to reduce consumption of electricity or natural gas or to improve the management of energy demand with respect to a dwelling unit. To the extent that an energy conservation expenditure by a taxpayer qualifies for this exclusion, tax law denies any other tax benefits on the same expenditure, and requires a reduction in the adjusted basis of the property to which the energy conservation devices were added.

Impact

The exclusion reduces the total cost of energy-efficiency devices provided under programs by utilities to conserve energy, since, absent such provisions, the value of the rebates or other incentives provided by the utility would be included in the customer's gross income and subject to tax. Depending on the marginal tax rate of the customer, the tax saving could be as much as one-third the value of the subsidy. While beneficiaries will be primarily residential customers, the exclusion applies to dwelling units and so could also be claimed by businesses that own condominiums or apartments, for example.

Rationale

An exclusion for residential customers had originally been enacted as part of the National Energy Conservation Policy Act of 1978 (P.L. 95-619). This exclusion was amended by Title V of the Energy Security Act of 1980 (P.L. 96-294), but had expired in mid-1989. The current provision was adopted as part of the Energy Policy Act of 1992 (P.L. 102-486), to encourage residential and business customers of public utilities to participate in energy conservation programs sponsored by the utility. The goal was to enhance the energy efficiency of dwelling units and encourage energy conservation in residential and commercial buildings. The Small Business Job Protection Act of 1996 (P.L. 104-188) repealed the partial exclusion with respect to business property, effective on January 1, 1997, unless pursuant to a binding contract in effect on September 13, 1995. In addition, the 1996 amendments dropped a part of section 136 that allowed the exclusion to apply to industrial energy conservation devices and technologies.

Assessment

Utilities sometimes use rebates and other incentives to induce their customers to invest in more energy efficient heating and cooling equipment, and other energy-saving devices. Such a program might be justified on the grounds of conservation, if consumption of energy resulted in negative effects on society, such as pollution. In general, however, it would be more efficient to directly tax energy fuels than to subsidize a particular method of achieving conservation. From an economic perspective, allowing special tax benefits for certain types of investment or consumption results in a misallocation of resources.

There may be a market failure in tenant-occupied homes, if the tenant pays for electricity separately. In rental housing, the tenant and the landlord lack strong financial incentives to invest in energy conservation equipment and materials, even when the benefits clearly outweigh the costs, because the benefits from such conservation may not entirely accrue to the party

undertaking the energy-saving expenditure and effort. Builders and buyers may also lack sufficient information, a problem which is discussed below.

As a general rule, tenants are not going to improve the energy efficiency of a residence that does not belong to them, even if the unit is metered. They might if the rate of return (or payback) is sufficiently large, but most tenants do not occupy rental housing long enough to reap the full benefits of the energy conservation investments. Part of the problem is also that it is not always easy to calculate the energy savings potential (hence rates of return) from the various retrofitting investments. Landlords may not be able to control the energy consumption habits of renters to sufficiently recover the full cost of the energy conservation expenditures, regardless of whether the units are individually metered. If the units are individually metered, then the landlord would not undertake such investments since all the benefits therefrom would accrue to the renters, unless a landlord could charge higher rents on apartments with lower utility costs. If the units are not individually metered, but under centralized control, the benefits of conservation measures may accrue largely to the landlord, but even here the tenants may have sufficient control over energy use to subvert the accrual of any gains to the landlord. In such cases, from the landlord's perspective, it may be easier and cheaper to forgo the conservation investments and simply pass on energy costs as part of the rents. Individual metering can be quite costly, and while it may reduce some of the distortions, it is not likely to completely eliminate them, because even if the landlord can charge higher rents, he may not be able to recover the costs of energy conservation efforts or investments.

These market failures may lead to underinvestment in conservation measures in rental housing and provide the economic rationale for Internal Revenue Code (IRC) §136. Without such explicit exclusion, such subsidies would be treated as gross income and subject to tax. This exclusion, however, applies both to owner-occupied and to rental housing.

Selected Bibliography

Bird, Bruce, Steven M. Platau, and Warren A. Beatty. "Excluding Utility Rebates from Gross Income." *The CPA Journal,* v. 63, March 1993.

Brown, Marilyn "Market Failures and Barriers as a Basis for Clean Energy Policies," *Energy Policy*, v. 29. November 2001, pp. 1197-1207.

Fisher, Anthony C., and Michael H. Rothkopf. "Market Failure and Energy Policy: A Rationale for Selective Conservation," *Energy Policy*, v. 17. August 1989, pp. 397-406.

Hahn, Robert W. "Energy Conservation: An Economic Perspective." American Enterprise Institute, October 2005.

Hassett, Kevin A., and Gilbert E. Metcalf. "Energy Conservation Investment: Do Consumers Discount the Future Correctly?" *Energy Policy*, v. 21. June 1993, pp. 710-716.

Howarth, Richard B. and Bo Anderson. "Market Barriers to Energy Efficiency." *Energy Economics,* October, 1993. pp. 262-292.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: July 28, 2006.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

_. *Energy Tax Provisions in the Energy Policy Act of 1992*. Library of Congress, Congressional Research Service Report 94-525. Washington, DC: June 22, 1994.

Loskamp, Wendy. Energy, Water Efficiencies and Savings Come From Meter Data Management. Energy Pulse. Insight Analysis and Commentary on the Global Power Industry. http\www.energypulse.net.

Pauley, Patricia, *et al*. "The Energy Policy Act of 1992: Provisions Affecting Individuals." *Taxes*, February, 1993, pp. 91-96.

Metcalf, Gilbert E. "Economics and Rational Conservation Policy." *Energy Policy*, v. 22. October 1994, pp. 819-825.

Sutherland, Ronald J. "Energy Efficiency or the Efficient Use of Energy Resources." *Energy Sources*, v. 16, pp. 257-268.

Sutherland, Ronald J. "The Economics of Energy Conservation Policy." *Energy Policy*, v. 24. April 1996, pp. 361-370.

U.S. Congress, House. *Report to Accompany H.R. 776, the Comprehensive Energy Policy Act.* Washington, DC: U.S. Government Printing Office, Report 102-474, Part 6, pp. 35-37.

— . House. Committee on Energy and Commerce. *National Energy Policy: Conservation and Energy Efficiency.* Hearings Before the Subcommittee on Energy and Air Quality. Washington, DC: U.S. Government Printing Office, June 22, 2001.

U.S. Department of Energy. Lawrence Berkeley National Laboratory. "Energy Efficiency, Market Failures, and Government Policy." Levine, Mark D., et al. March 1994.

U.S. Department of the Treasury. Internal Revenue Service. *Gross Income v. Non-Gross Income: Energy Conservation Subsidies Provided by Utilities.* Letter Ruling 200717010. January 19, 2007.

EXPENSING OF EXPLORATION AND DEVELOPMENT COSTS; AMORTIZATION OF GEOLOGICAL AND GEOPHYSICAL COSTS: OIL, GAS, AND OTHER FUELS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals		Corporations		Total	
	Oil and Gas	Other Fuels	Oil and Gas	Other Fuels	Oil and Gas	Other Fuels
2008	([1])	([1])	2.2	([1])	2.2	([1])
2009	0.1	([1])	3.2	([1])	3.3	([1])
2010	0.1	([1])	1.9	([1])	2.0	([1])
2011	0.1	([1])	0.6	([1])	0.7	([1])
2012	0.1	([1])	0.6	([1])	0.7	([1])

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 263(c), 291, 616-617, 57(a)(2), 59(e) and 1254.

Description

Firms engaged in the exploration and development of oil, gas, or geothermal properties have the option of expensing (deducting in the year paid or incurred) rather than capitalizing (*i.e.*, recovering such costs through depletion or depreciation) certain intangible drilling and development costs (IDCs). Expensing is an exception to general tax rules that provide for the capitalization of costs related to generating income from capital assets. In lieu of expensing, firms have the option of amortizing IDCs in equal amounts over a five-year period. This option may reduce or eliminate the alternative minimum tax on the IDCs, which, as discussed below, is a tax preference item.

IDCs are amounts paid by the operator for fuel, labor, repairs to drilling equipment, materials, hauling, and supplies. They are expenditures incident to and necessary for the drilling of wells and preparing a site for the production of oil, gas, or geothermal energy. IDCs include the cost to operators of any drilling or development work done by contractors under any form of contract, including a turnkey contract. Amounts paid for casings, valves, pipelines, and other tangible equipment that have a salvage value are capital expenditures and they cannot be expensed; they are recovered through depreciation. (And as discussed in the subsequent entry on percentage depletion, amounts expended to purchase a property are depleted using either percentage or cost depletion.) Geological and geophysical (G&G) costs — exploratory costs associated with determining the precise location and potential size of a mineral deposit — are amortized by independents over two years and by major integrated oil companies over seven years.

The option to expense IDCs applies to domestic properties, which include certain off-shore wells (essentially those within the exclusive economic zone of the United States), including generally offshore platforms subject to certain restrictions. Except for IDCs incurred in the North Sea, IDCs on foreign properties must be either amortized (deducted in equal amounts) over 10 years or added to the adjusted cost basis and recovered through cost depletion. An integrated oil company, generally a large producer that also has refining and marketing operations, can expense only 70% of the IDCs — the remaining 30% must be amortized over a five-year period. Dry hole costs for either domestic or foreign properties may be expensed or capitalized at the discretion of the taxpayer.

For integrated producers, the excess of expensed IDCs over the amortizable value (over a 10-year period) is a tax preference item that is subject to the alternative minimum tax to the extent that it exceeds 65% of the net income from the property. Independent (non-integrated) producers include only 60% of their IDCs as a tax preference item. As noted above, instead of expensing, a taxpayer may choose to amortize IDCs over a five-year period and avoid the alternative minimum tax. The amortization claimed under IRC section 59(e) is not considered a tax preference item for alternative minimum tax purposes. Prior to 1993, an independent producer's intangible drilling costs were subject to the alternative minimum tax, and they were allowed a special "energy deduction" for 100% of certain IDCs, subject to some limitations. If an operator has elected to amortize IDCs on a well that proves later to be a dry hole, the operator may deduct such costs as an ordinary loss. The taxpayer is not required to include these costs as an IDC tax preference item in computing alternative minimum tax. If a property is disposed of prior to its exhaustion, any expensed IDCs are recaptured as ordinary income.

Impact

IDCs and other intangible exploration and development costs represent a major portion of the costs of finding and developing a mineral reserve. In the case of oil and gas, which historically accounted for 99% of the revenue loss from this provision, IDCs typically account for about 66% of the total exploration and development costs — the cost of creating a mineral asset.

Historically, expensing of IDCs was a major tax subsidy for the oil and gas industry, and, combined with other tax subsidies such as the depletion allowance, reduced effective tax rates significantly below tax rates on other industries. These subsidies provided incentives to increase investment, exploration, and output, especially of oil and gas. Oil and gas output, for example, rose from 16% of total U.S. energy production in 1920 to 71.1% in 1970 (the peak year). Coupled with reductions in corporate income tax rates, increased limits on expensing, and the alternative minimum tax, the value of this subsidy has declined over time. And, since the early 1970s, domestic crude oil production has fallen substantially. However, the subsidy still keeps effective marginal tax rates on oil and gas (especially for independent producers) somewhat below the marginal effective tax rates on other industries in most cases.

Unlike percentage depletion, which may only be claimed by independent producers, this tax expenditure is shared by both independents and by the integrated oil and gas producers. However, independent oil producers, many of which are large, drill 80-90% of the wells and undertake the bulk of the expenditures for exploration and development, thus receiving the bulk of the benefits from this tax expenditure. The at-risk, recapture, and minimum tax restrictions that have since been placed on the use of the provision have primarily limited the ability of high-income taxpayers to shelter their income from taxation through investment in mineral exploration. However, the exemption for working interests in oil and gas from the passive loss limitation rules still creates opportunities for tax shelters in oil and gas investments.

Rationale

Expensing of IDCs was originally established in a 1916 Treasury regulation (T.D. 45, article 223), with the rationale that such costs were ordinary operating expenses.

In 1931, a court ruled that IDCs were capital costs, but permitted expensing, arguing that the 15-year precedent gave the regulation the force of a statute. In 1942, Treasury recommended that expensing be repealed, but Congress did not take action. A 1945 court decision invalidated expensing, but Congress endorsed it (on the basis that it reduced uncertainty and stimulated exploration of a strategic mineral) and codified it as section

263(c) in 1954. Continuation of expensing has been based on the perceived need to stimulate exploratory drilling, which can increase domestic oil and gas reserves, and (eventually) production, reduce imported petroleum, and enhance energy security. However, none of the four economic rationales for intervention in the energy markets (the market failures rationales) justify expensing treatment of IDCs.

The Tax Reform Act of 1976 added expensing of IDCs as a tax preference item subject to the minimum tax. Expensing of IDCs for geothermal wells was added by the Energy Tax Act of 1978. The Tax Equity and Fiscal Responsibility Act of 1982 limited expensing for integrated oil companies to 85%; the remaining 15% of IDCs had to be amortized over 3 years.

The Deficit Reduction Act of 1984 limited expensing for integrated producers to 80% of IDCs. The Tax Reform Act of 1986 established uniform capitalization rules for the depreciation of property, but IDCs (as well as mine development and other exploration costs) are exempt from those rules. The Tax Reform Act further limited expensing for integrated producers to 70% of costs, and also repealed expensing of foreign properties.

In 1990, a special energy deduction was introduced, against the alternative minimum tax, for a portion of the IDCs and other oil and gas industry tax preference items. For independent producers, the Energy Policy Act of 1992 limited the amount of IDCs subject to the alternative minimum tax to 60% (70% after 1993) and suspended the special energy deduction through 1998. The Energy Policy Act of 2005 (P.L. 109-58) included a provision to amortize geological and geophysical (G&G) costs over two years. The Tax Increase Prevention and Reconciliation Act of 2006 (P.L. 109-222) raised the amortization period for geological and geophysical costs to five years for major integrated oil companies. The Energy Independence and Security Act of 2007 (P.L. 110-140), enacted on December 19, 2007, further raised the amortization period for geological and geophysical expenditures incurred by major integrated oil companies from five to seven years.

Assessment

IDCs are generally recognized to be capital costs, which, according to standard economic principles, should be recovered using depletion (cost depletion adjusted for inflation). Lease bonuses and other exploratory costs (survey costs, geological and geophysical costs) are properly treated as capital costs, although they may be recovered through percentage rather than cost depletion. From an economic perspective, dry hole costs should also be depleted, rather than expensed, as part of the costs of drilling a successful well.

Immediate expensing of IDCs provides a tax subsidy for capital invested in the mineral industry, especially for oil and gas producers, with a relatively larger subsidy for independent producers. Technological innovation has reduced the percentage of dry holes in both exploratory and development drilling, thus reducing the tax benefits from immediate expensing of dry hole costs.

Expensing rather than capitalizing IDCs allows taxes on income to be effectively eliminated. As a capital subsidy, however, expensing is economically inefficient because it promotes investment decisions that are based on tax considerations rather than inherent economic considerations.

To the extent that IDCs stimulate drilling of successful wells, they reduce dependence on imported oil in the short run, but contribute to a faster depletion of the nation's resources in the long run. Arguments have been made over the years to justify expensing on grounds of unusual risks, national security, uniqueness of oil as a commodity, the industry's lack of access to capital, and protection of small producers.

Volatile oil prices make oil and gas investments very risky, but this would not necessarily justify expensing. The corporate income tax does have efficiency distortions, but economists argue that income tax integration may be a more appropriate policy to address this issue; sustained high oil and gas prices increase profits and provide sufficient financial incentives for exploration and drilling, making expensing unnecessary. For the goal of enhancing energy security, one alternative approach is through an oil stockpile program such as the Strategic Petroleum Reserve.

Selected Bibliography

Congressional Budget Office. Budget Options. Section 28: Repeal the Expensing of Exploration and Development Costs for Extractive Industries February 2007, p. 295.

Eicher, Jeffrey D. And Leo N. Hitt. "The Alternative Minimum Tax System: A Stealth Tax," *Taxes,* v. 84 July 2006, pp. 37-45.

Friske, Karyn Bybee. "Alternative Minimum Tax Credit and the Consolidated Regulations: Is Simplification Possible?" *The Oil and Gas and Energy Quarterly*, September 2001, pp.139-145.

Ghiselin, Dick. "Drilling Economics" *Oil and Gas Investor,* December 2005, pp.13-22.

Gravelle, Jane G. "Effective Federal Tax Rates on Income from New Investments in Oil and Gas Extraction," *The Energy Journal*, v. 6 (1985), pp. 145-153.

Lazzari, Salvatore. *Energy Tax Policy*: History and Current Issues. Library of Congress, Congressional Research Service, Report RL33578. Washington, DC: Updated September 23, 2004.

— . *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL30406. Washington, DC: June 28, 2005.

— . *Energy Tax Provisions in the Energy Policy Act of 1992*. Library of Congress, Congressional Research Service, Report 94-525 E. Washington, DC: June 22, 1994. (Archived: Available upon request from the author.)

Lucke, Robert, and Eric Toder. "Assessing the U.S. Federal Tax Burden on Oil and Gas Extraction," *The Energy Journal*, v. 8. October 1987, pp. 51-64.

Rook, Lance W. "The Energy Policy Act of 1992 Changes the Effect of the AMT on Most Oil and Gas Producers," *Tax Adviser*, v. 24 (August 1993), pp. 479-484.

U.S Congress, Senate Committee on Finance. *JCT Description of Federal Energy Tax Provisions*, Hearings, 107th Congress, 1st session. Washington, DC: U.S. Government Printing Office, July 10th and 11, 2001.

U.S. General Accounting Office. *Additional Petroleum Production Tax Incentives Are of Questionable Merit*, GAO/GGD-90-75. July 1990. Washington, DC: U.S. Government Printing Office, July 1990.

U.S. Department of Energy. Energy Information Administration. *Performance Profiles of Major Energy Producers.* DOE/EIA-0206(06). December 2007.

U.S. Department of Energy. Energy Information Administration. *Federal Interventions and Subsidies in Energy Markets.* SR/CNEAF/2008-01. April 2008.

U.S. Treasury Department. *Tax Reform for Fairness, Simplicity, and Economic Growth*, v. 2. November 1984, Washington, DC: 1984, pp. 229-231.

U.S. Treasury Department. Internal Revenue Service. *Publication 535: Business Expenses.* 2005.

Zlatkovich, Charles P., and Karl B. Putnam. "Economic Trends in the Oil and Gas Industry and Oil and Gas Taxation," *Oil and Gas Quarterly*, v. 41. March, 1993, pp. 347-365.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT QUALIFIED PRIVATE ACTIVITY BONDS FOR ENERGY PRODUCTION FACILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	([1])	0.1
2009	0.1	([1])	0.1
2010	0.1	([1])	0.1
2011	0.1	([1])	0.1
2012	0.1	([1])	0.1

([1]) Less than $50 million.

Authorization

Sections 103, 141, 142(f), and 146.

Description

Interest income on State and local bonds used to finance the construction of certain energy facilities for a city and one contiguous county or two contiguous counties, is tax exempt. These energy facility bonds are classified as private-activity bonds, rather than as governmental bonds, because a substantial portion of their benefits accrues to individuals or business rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

These bonds may be issued to finance the construction of hydroelectric generating facilities at dam sites constructed before March 18, 1979, or at sites without dams that require no impoundment of water. Bonds may also

be issued to finance solid waste disposal facilities that produce electric energy. These exempt facility bonds generally are subject to the State private-activity bond annual volume cap. Bonds issued for government-owned solid waste disposal facilities, a different category of private activity bond, are not, however, subject to the volume cap.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to provide the services of local energy facilities at lower cost.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and users of the energy facilities, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

The Crude Oil Windfall Profits Tax Act of 1980 used tax credits to encourage the private sector to invest in renewable energy sources. Because State and local governments pay no Federal income tax, Congress in this Act authorized governmental entities to use tax-exempt bonds to reduce the cost of investing in hydroelectric generating facilities. The portion of the facility eligible for tax-exempt financing ranged from 100 percent for 25-megawatt facilities to zero percent for 125-megawatt facilities.

The definition of solid waste plants eligible for tax-exempt financing was expanded by the 1980 Act because the Treasury regulations then existing denied such financing to many of the most technologically efficient methods of converting waste to energy. This expansion of eligibility included plants that generated steam or produced alcohol. Tax exemption for steam generation and alcohol production facilities bonds were eliminated by the 1986 Tax Act.

Assessment

Any decision about changing the status of these two eligible private activities would likely consider the Nation's need for renewable energy sources to replace fossil fuels, and the importance of solid waste disposal in contributing to environmental goals.

Even if a case can be made for a Federal subsidy of energy production facilities based on underinvestment at the State and local level, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, those issued for energy production facilities increase the financing cost of bonds issued for other public capital. With a greater supply of public bonds, the interest rate on the bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds increases the range of assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457.

— . *Private Activity Bonds: An Analysis of State Use*. Library of Congress, Congressional Research Service Report RL34159.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638.

U.S. Congress, Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

U.S. Congress, Joint Committee on Internal Revenue Taxation. *General Explanation of the Crude Oil Windfall Profits Tax Act of 1980*. 96th Congress, 2nd session, 1980.

U.S. Department of Treasury, Internal Revenue Service. *Tax-Exempt Private Activity Bonds*, Publication 4078, June 2004.

Zimmerman, Dennis. *Electricity Restructuring and Tax-Exempt Bonds: Economic Analysis of Legislative Proposals*, Library of Congress, Congressional Research Service Report RL30411.

— . *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

TAX CREDIT FOR PRODUCTION OF NON-CONVENTIONAL FUELS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.1	0.1
2009	([1])	0.1	0.1
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1]) Positive tax expenditure of less than $50 million

Authorization

Section 45K.

Description

Section 45K provides for a production tax credit of $3 per barrel of oil-equivalent (in 1979 dollars) for certain types of liquid, gaseous, and solid fuels produced from selected types of alternative energy sources (so called "non-conventional fuels"), and sold to unrelated parties. The full credit is available if oil prices fall below $23.50 per barrel (in 1979 dollars); the credit is phased out as oil prices rise above $23.50 (in 1979 dollars) over a $6 range (i.e., the inflation-adjusted $23.50 plus $6). The phase out limit does not apply to coke or coke gas.

Both the credit and the phase-out range are adjusted for inflation (multiplied by an inflation adjustment factor) since 1979. For 2007 the reference price of oil is $66.52. The inflation adjustment factor is 2.4160 and the nonconventional source fuel credit prior to phase out is $7.25 ($3 x 2.4160) barrel-of-oil equivalent of qualified fuels. Because the reference

price exceeds $23.50 multiplied by the inflation adjustment factor, the credit per barrel equivalent of qualified fuel sold in calendar year 2007 is reduced by $4.87 to $2.38. With an inflation adjustment factor of 2.264 (meaning that inflation, as measured by the Gross National Product deflator, has more than doubled since 1979), the credit for 2005 production was $6.79 per barrel of oil equivalent, which is the amount of the qualifying fuel that has a British thermal unit content of 5.8 million. The credit for gaseous fuels was $1.23 per thousand cubic feet (mcf). The credit for tight sands gas is not indexed to inflation; it is fixed at the 1979 level of $3 per barrel of oil equivalent (about $0.50 per mcf). With the reference price of oil, which was $50.76/barrel for 2005, still below the inflation adjustment phase-out threshold oil price of $53.20 for 2005 ($23.50 multiplied by 2.264), the full credit of $6.56 per barrel of equivalent was available for qualifying fuels.

Qualifying fuels include synthetic fuels (either liquid, gaseous, or solid) produced from coal, and gas produced from either geopressurized brine, Devonian shale, tight formations, or biomass. Synthetic fuels from coal, either liquid, gaseous, or solid, are also qualifying fuels provided that they meet the statutory and regulatory requirement that they undergo a significant chemical transformation, defined as a measurable and reproducible change in the chemical bonding of the initial components. In most cases, producers apply a liquid bonding agent to the coal or coal waste (coal fines), such as diesel fuel emulsions, pine tar, or latex, to produce the solid synthetic fuel. The coke or coke gas made from coal and used as a feedstock, or raw material (e.g., coke used in steel-making) also qualifies as a synthetic fuel as does the breeze (which are small pieces of coke) and the coke gas (which is produced during the coking process). However, coke or coke gas made from petroleum does not qualify for the tax credit. Depending on the precise Btu content of these synfuels, the section 45K tax credit could be as high as $26/ton or more, which is a significant fraction of the market price of coal. Qualifying fuels must be produced within the United States. The credit for coke and coke gas is also $3/barrel of oil equivalent and is also adjusted for inflation, but the credit is set to a base year of 2004, making the nominal unadjusted tax credit less than for other fuels.

The section 45K credit for gas produced from biomass, and synthetic fuels produced from coal or lignite, is available through December 31, 2007, provided that the production facility was placed in service before July 1, 1998, pursuant to a binding contract entered into before January 1, 1997. Thus, generally, the credit has expired. The credit for coke and coke gas is available through December 31, 2009, for plants placed in service before January 1, 1992, and after June 30, 1998. The section 45K credit used to apply to oil produced from shale or tar sands, and coalbed methane (a colorless and odorless natural gas that permeates coal seams and that is virtually identical to conventional natural gas). But for these fuels the credit terminated on December 31, 2002 (and the facilities had to have been placed in service (or wells drilled) by December 31, 1992).

The section 45K credit is part of the general business credit. It is not claimed separately; it is added together with several other business credits, and is also subject to the limitations of that credit. The section 45K credit is also offset (or reduced) by other types of government subsidies that a taxpayer may benefit from: government grants, subsidized or tax-exempt financing, energy investment credits, and the enhanced oil recovery tax credit that may be claimed with respect to such project. Finally, the credit is nonrefundable and cannot be used to offset a taxpayer's alternative minimum tax liability. Any unused section 45K credits generally may not be carried forward or back to another taxable year. (However, under the minimum tax section 53, a taxpayer receives a credit for prior-year minimum tax liability to the extent that a section 45K credit is disallowed as a result of the operation of the alternative minimum tax.)

Impact

The production tax credit is intended to reduce the marginal (and average) costs of producing the qualifying non-conventional fuels so as to be profitable enough to compete with conventional fuels. For those fuels whose cost reductions (and increased rates of return) are sufficiently large, the resulting price effects could encourage increased production of the subsidized non-conventional fuels for the more conventional fuels. To the extent that these effects stimulate the supply of fuels such as shale oil or heavy oil, the resulting substitution effects lead to a reduction in the demand for petroleum, and a reduction in imported petroleum (the marginal source of oil), which would work toward the credit's original purpose: enhancing energy security.

However, to date, the credits have not stimulated production of fuels, such as shale oil or heavy oil, that would substitute for petroleum. These and other non-conventional fuels are still generally too costly to be profitably produced. With the exception of coalbed methane, tight sands gas, and "synfuels" from coal, the credit's effects have, generally, not been sufficient to offset the disincentive effects of previously low and unstable oil prices, and the high cost of non-conventional fuels mining and production. High crude oil prices can render some of the non-conventional petroleum fuels (such as oil shale and tar sands) competitive, which might stimulate production even without a tax credit. However, variable oil prices add to the risk of these and other types of energy ventures and investments, and undermine profitability and investments in these areas.

The primary supply effects of the section 45K tax credit have been on non-conventional gases, particularly of coalbed methane, tight sands gas, and shale gas. The credit has increased drilling for these gases, and added to total natural gas reserves. In the case of coalbed methane, the combined effect of the large tax credit (the credit of $1.00 per mcf was, at times, 100% of natural gas prices) and declining production costs (due to technological

advances in drilling and production techniques) has helped boost production from 0.1 billion cubic feet in 1980 to 1.6 trillion cubic feet in 2003. More recently, favorable rulings by the Internal Revenue Service have increased the production of solid "synthetic" fuels from coal, increasing the supply of these fuels for use as a feedstock in steel-making operations and in electricity generation. The credit for coalbed methane benefits largely oil and gas producers, both independent producers and major integrated oil companies, and coal companies. Many oil and gas companies, such as DTE Energy, Phillips Petroleum, and the Enron Corporation, used section 45K tax credits to help reduce their effective tax rates.

Rationale

The original concept for the alternative fuels production tax credit goes back to an amendment by Senator Talmadge to H.R. 5263 (95th Congress), the Senate's version of the Energy Tax Act of 1978 (P.L. 95-618), one of five public laws in President Carter's National Energy Plan. H.R. 5263 provided for a $3.00 per barrel tax credit or equivalent, but only for production of shale oil, gas from geopressurized brine, and gas from tight rock formations.

The final version of the Energy Tax Act did not include the production tax credit. The original concept was resuscitated in 1979 by Senator Talmadge as S. 847 and S. 848, which became part of the Crude Oil Windfall Profit Tax Act of 1980 (P.L. 96-223).

The purpose of the credits was to provide incentives for the private sector to increase the development of alternative domestic energy resources because of concern over oil import dependence and national security. The United States has a large resource base of unconventional energy resources, including shale oil and unconventional gases such as tight sands gas and coalbed methane. According to the U.S. Geological Survey and the Minerals Management Service, estimated U.S. recoverable reserves of unconventional gases exceed those of any other category of gas, including estimates of conventional reserves, comprising 35% of the total.

The section 45K credit's "placed-in-service" rule has been amended several times in recent years. The original 1980 windfall profit tax law established a placed-in-service deadline of December 31, 1989. This was extended by one year to December 31, 1990, by the Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647). That deadline was extended to December 31, 1991, as part of OBRA, the Omnibus Budget Reconciliation Act of 1990 (P.L.101-508). The Energy Policy Act of 1992 (P.L.102-486) extended coverage for facilities for biomass and fuels produced from coal through 1997 and extended the credit on production from these facilities through 2007. The Small Business Jobs Protection Act of 1996 (P.L. 104-188) further extended the placed-in-service rule by an

additional eighteen months. In Rev. Proc. 2001-30 and 2001-34, the Internal Revenue Service implemented regulations that permitted greater production of solid synthetic fuels from coal to qualify for the section 45K credit. Some have questioned the scientific validity of these rules and have christened the process "spray and pray."

The American Jobs Creation Act of 2004 (P.L. 108-357) provided a production tax credit for refined coal. The production tax credit's provisions were inserted in section 45 of the tax code, the section that provides a tax credit for electricity produced from renewable energy resources. (A discussion of the section 45 tax credit appears elsewhere in the Energy section of this compendium.)

The Energy Policy Act of 2005 (P.L. 109-58) made several amendments to the section 45K tax credit. First, the credit's provisions were moved from section 29 of the tax code to new §45K. Before this, this credit was commonly known as the "section 29 credit." Second, the credit was made available for qualified facilities that produce coke or coke gas that were placed in service before January 1, 1993, or after June 30, 1998, and before January 1, 2010. Coke and coke gas produced and sold during the period beginning on the later of January 1, 2006, or the date the facility is placed in service, and ending on the date which is four years after such period begins, would be eligible for the production credit, but at a reduced rate and only for a limited quantity of fuel. The tax credit for coke and coke gas would be $3.00/barrel of oil equivalent, but the credit would be indexed for inflation starting with a 2004 base year as compared with a 1979 base year for other fuels. A facility producing coke or coke gas and receiving a tax credit under the previous section 29 rules would not be eligible to claim the credit under the new section 45K. The new provision also requires that the amount of credit-eligible coke produced not exceed an average barrel-of-oil equivalent of 4,000 barrels per day. Third, the 2005 Act provided that, with respect to the IRS moratorium on taxpayer-specific guidance concerning the credit, the IRS should consider issuing rulings and guidance on an expedited basis to those taxpayers who had pending ruling requests at the time that the IRS implemented the moratorium. Finally, the 2005 legislation made the general business limitations applicable to the tax credit. Any unused credits could be carried back one year and forward 20 years, except that the credit could not be carried back to a taxable year ending before January 1, 2006. These new rules were made effective for fuel produced and sold after December 31, 2005, in taxable years ending after such date.

The Tax Relief and Health Care Act of 2006 (P.L. 109-432) eliminated the phase out limit for coke and coke gas, and clarified that petroleum based coke or coke gas does not qualify.

Assessment

The section 45K credit has significantly reduced the cost and stimulated the supply of unconventional gases — particularly of coalbed methane from coal seams not likely to be mined for coal in the foreseeable future, and of tight sands gas and shale gas. Due to recently tight natural gas markets and relatively high prices, these additional supplies might have kept natural gas prices from rising even more. In general, much of the added gas output has substituted for domestic and imported (i.e., Canadian) conventional natural gas rather than for imported petroleum, meaning that the credit has basically not achieved its underlying energy policy objective of enhancing energy security by reducing imported petroleum. More recently, additional supplies of domestic unconventional gases may be substituting for imported LNG (liquefied natural gas). Declining conventional natural gas production in Texas, New Mexico, Oklahoma, Louisiana, and the Gulf of Mexico has been partially offset by increases in Colorado and Wyoming, reflecting the growing prominence of unconventional sources such as tight sands, shales, and coalbeds. Unconventional gas production, currently at nearly 5 trillion cubic feet (1/4 of total domestic production), is projected to increase at the fastest rate of any other type of natural gas, largely because of expansion of unconventional gases from the Rocky Mountain region.

Economists see little justification for such a credit on grounds of allocative efficiency, distributional equity, or macroeconomic stability. From an economic perspective, although tax incentives are generally less distortionary than mandates and standards, critics maintain that the section 45K tax credit compounds distortions in the energy markets, rather than correcting for preexisting distortions due to pollution, oil import dependence, "excessive" market risk, and other factors. Such distortions may be addressed by other policies: Pollution and other environmental externalities may be dealt with by differential taxes positively related to the external cost; excessive dependence on imported petroleum and vulnerability to embargoes and price shocks have led to calls for either an oil import tax or a petroleum stockpile such as the Strategic Petroleum Reserve.

The credit has not encouraged the collection of coalbed methane from active coal mines, which continues to be vented and which contributes a potent greenhouse gas linked to possible global warming. Hydraulic fracturing of coal beds, and other environmental effects from the production of coalbed methane and other unconventional gases, is coming under greater scrutiny.

In recent years, much of the benefits of the tax credits has accrued to coal producers and users, who spray the coal with a fuel and sell it as a solid "synthetic fuel." The coal industry has also benefitted from the expansion of the credit to coke and coke gas. Under the original statute and regulations, such conversion of coal into a synthetic fuel was premised on a significant

chemical transformation that would increase the energy content of the resulting fuel.

Selected Bibliography

Andrews, Anthony. *Oil Shale: History, Incentives, and Policy*. Library of Congress. Congressional Research Service Report RL33359, Washington, D.C. April 13, 2006.

Bryner, Gary C. "Coalbed Methane Development: The Costs and Benefits of an Emerging Energy Resource." *Natural Resource Journal,* v. 43, Spring 2003. pp. 519-560.

Clark, Judy. "Geopolitics, Unconventional Fuels to Reshape Industry," *Oil and Gas Journal*, April 25, 2005, pp 44-44

Crow, Patrick, and A.D. Koen. "Tight Gas Sands Drilling Buoying U.S. E & D Activity." *Oil and Gas Journal*, v. 90. November 2, 1992, pp. 21-27.

Fletcher, Sam. "Major U.S. Supply Role Seen for Unconventional Gas," *Oil and Gas Journal*, December 20, 2004, pp. 32-34.

Kuuskraa, Vello A., and Charles F. Brandenburg. "Coalbed Methane Sparks New Energy Industry," *Oil and Gas Journal*, v. 87. October 9, 1989, pp. 49-56.

Lazzari, Salvatore. *Economic Analysis of the Section 29 Tax Credit for Unconventional Fuels*, Library of Congress, Congressional Research Service Report 97-679 E. Washington, DC: July 7, 1997.

—. "Energy Taxation: Subsidies for Biomass," *Encyclopedia of Energy Technology and the Environment*, John Wiley & Sons, 1995, pp. 1238-1245.

—. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578, Washington, D.C. July 28, 2006.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

Lemons, Bruce N. and Larry Nemirow. "Maximizing the Section 29 Credit in Coal Seam Methane Transactions," *The Journal of Taxation*. April 1989, pp. 238-245.

Matlock, Judith M. and Laurence E. Nemirow. "Section 29 Credits: The Case Against Requiring an NGPA Well-Category Determination," *Journal of Taxation*, v. 85. August 1996, pp. 102-107.

McIntire Robert, and T.D. Coo Nguyen. *Corporate Income Taxes in the 1990s.* Citizens for Tax Justice. October 2000.

McKinnon, John D. "Washington Alchemy Turns Coal Products Into Big Tax Credits." *The Wall Street Journal*, v. 238, July 12, 2001.

Morgan, Dan. "Coal State Senators Question Tax Audits: IRS Reviews Use of Synthetic Fuel Credits." *The Washington Post,* September 13, 2003. p. A-3.

Schraufnagel, D. G. Hill and R. A. McBane. *Coalbed Methane: A Decade of Success*. Paper Presented at the Conference of the Society of Petroleum Engineers. 1994.

U.S. Treasury Department. Internal Revenue Service. *IRS Notice 2008-44 on Section 45K Inflation Adjustment Factor, Reference Price for Nonconventional Source Fuel Credit.* March 31, 2008.

Wills, Irene Y, and Norman A. Sunderman. "Section 29 Tax Credit Still Available," *Oil and Gas Tax Quarterly*, v. 40. December 1991.

TAX CREDIT FOR THE PRODUCTION OF ENERGY-EFFICIENT APPLIANCES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.1	0.1
2009	-	0.1	0.1
2010	-	0.1	0.1
2011	-	([1])	([1])
2012	-	-	-

([1])Less than $50 million.

Authorization

Section 45M.

Description

Internal Revenue Code section 45M provides a tax credit for the eligible production (manufacture) of certain energy-efficient dishwashers, clothes washers, and refrigerators. For dishwashers, the per unit is as follows: $45 for models manufactured in calendar year 2008 or 2009 which use no more than 324 kilowatt hours (kWh) per year and 5.8 gallons per cycle; and $75 for models manufactured in calendar year 2008, 2009, or 2010 which use no more than 307 kWh per year and 5.5 gallons per cycle. The credit for clothes washers ranges from $75 to $250 per unit, as follows: $75 for residential top-loading models manufactured in 2008 which meet or exceed a 1.72 modified energy factor (MEF) and do not exceed a 8.0 water consumption factor (WCF); $125 for residential top-loading models manufactured in 2008 or 2009 which meet or exceed a 1.8 MEF and do not exceed a 7.5 WCF; $150 for residential or commercial models manufactured in 2008, 2009, or 2010 which meet or exceed a 2.0 MEF and do not exceed a 6.0 WCF; and

$250 for residential or commercial models manufactured in 2008, 2009, or 2010 which meet or exceed a 2.2 MEF and do not exceed a 4.5 WCF.

The total amount of energy efficient appliance credit available for a tax year is equal to the sum of the credit amount separately calculated for each type of qualified energy-efficient appliance produced by the taxpayer during the calendar year ending with or within that tax year. However, with one exception, each manufacturer is limited to a total of $75 million per tax year for all qualifying appliances manufactured during that year. The exception is for refrigerators manufactured in 2008, 2009, or 2010 which consume at least 30% less energy than the 2001 energy conservation standards and residential and commercial clothes washers manufactured in 2008, 2009 or 2010 which meet or exceed a 2.2 MEF and do not exceed a 4.5 WCF. For these appliances there is no separate limit, and the credits used do not add to the $75 million aggregate credit limit. In addition to the $75 million cap on the credit allowed, the credit allowed in a taxable year for all appliances may not exceed 2% of the average annual gross receipts of the taxpayer for the three taxable years preceding the taxable year in which the credit is determined. The appliance credit is part of the general business credit. It is claimed in concert with a variety of other business tax credits, and it is subject to the limits of those credits as well. This provision became effective for appliances produced after December 31, 2005.

Impact

The appliance tax credits provide a per-unit subsidy to those domestic companies (Whirlpool, General Electric, etc.) that manufacture energy-efficient appliances that qualify for the Energy Star program. Appliances and other energy using items receive an Energy Star label from the Department of Energy if they use less energy than the minimum federal standard for that item. This subsidy helps to offset some of the cost of manufacturing such appliances, which are generally more costly than less energy efficient ones. In general, most of the energy saving appliances are also the more expensive and purchased more by relatively higher income households. The credit thus lowers the marginal and average costs of producing the more energy efficient appliances, which shifts production of such upscale appliances (and producers of such appliances) at the expense of the lower end models. This would generally lead to a lower market price to consumers — i.e., part of the production subsidy is shifted forward to consumers as a lower price net of the subsidy — but an increase in the total resource costs of producing the appliances inclusive of the subsidy. This may raise questions about the distributional impacts of the appliance tax credits. It also shifts what are otherwise private production costs onto taxpayers.

While not directly affecting consumers, manufacturers of energy efficient clothes washers, dishwashers and refrigerators are eligible for tax breaks

themselves. The combination of production credits and energy savings from use of the more energy efficient products might spur additional sales and use. For example, homeowners might be induced to upgrade to the more energy-efficient appliances that qualify for the credit.

Rationale

Section 45M was established by the Energy Policy Act of 2005 (P.L. 109-58) to encourage production of appliances that exceed the minimum federal energy-efficiency standards, and thus qualify for the federal Energy Star energy-efficiency program. For appliances produced beginning in 2008, the Emergency Economic Stabilization Act of 2008 (P.L. 110-343) restructured and raised the basic credit amounts, tightened the energy efficiency standards, and extended the credit for appliances manufactured through 2010.

Assessment

From an economic perspective, allowing special tax credits for certain targeted activities distorts the allocation of resources, encouraging companies to undertake certain types of investments and production that would not otherwise be economical at current and expected prices and rates of return. For instance, the credits are targeted for only three of the many home appliances — they exclude, for instance, clothes dryers and range ovens. Studies have shown that clothes dryers consume four times as much energy (in kilowatts per hour) than a refrigerator and 10 times more energy than a clothes washer. Also, since appliance manufacturers also have to comply with federal energy efficiency standards, the tax credits act as incentives to shift resources toward the more expensive and least economical appliance. Some of the tax credits accrue to the manufacturer as increased profits and economic rents. The credits, thus, may be viewed as a form of corporate welfare, and are questionable on distributional grounds — they may provide more benefits to upper income households than to lower income ones. Such a program is often justified on the grounds of energy conservation, if consumption of energy resulted in negative effects on society, such as pollution. In general, however, it would be more efficient to directly tax energy fuels than to subsidize a particular method of achieving conservation.

There are no generally acknowledged market failures in the production of energy efficient appliances and other capital goods. There may be a market failure in decisions by builders to invest in appliances and other energy using equipment to equip a building. The builder's incentive is to use the least costly, i.e., what may be the least energy efficient, appliance since this leads to a lower price and more profit for each dwelling unit sold, but whereas the builder does not have to pay the energy bills, the home buyer or investor has to make such monthly payments. Such a buyer of the new home might

otherwise invest in the more expensive, but more energy saving, appliances. There are market failures in research and development and which serve as the economic rationale for the various tax subsidies for R&D expenditures as discussed elsewhere in this compendium. R&D for energy-saving devices also qualifies for such subsidies.

Selected Bibliography

Brown, Marilyn. "Market Failures and Barriers as a Basis for Clean Energy Policies," *Energy Policy*, v. 29. November 2001, pp. 1197-1207.

Fisher, Anthony C., and Michael H. Rothkopf. "Market Failure and Energy Policy: A Rationale for Selective Conservation," *Energy Policy*, v. 17. August 1989, pp. 397-406.

Hahn, Robert W. "Energy Conservation: An Economic Perspective." American Enterprise Institute, October 2005.

Hassett, Kevin A., and Gilbert E. Metcalf. "Energy Conservation Investment: Do Consumers Discount the Future Correctly?" *Energy Policy*, v. 21. June 1993, pp. 710-716.

Howarth, Richard B. and Bo Anderson. "Market Barriers to Energy Efficiency." *Energy Economics,* October, 1993. pp. 262-292.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: July 28, 2006.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

_. *Energy Tax Provisions in the Energy Policy Act of 1992*. Library of Congress, Congressional Research Service Report 94-525. Washington, DC: June 22, 1994.

Loskamp, Wendy. "Energy, Water Efficiencies and Savings Come From Meter Data Management. Energy Pulse." Insight Analysis and Commentary on the Global Power Industry. http\www.energypulse.net.

Metcalf, Gilbert E. "Economics and Rational Conservation Policy." *Energy Policy*, v. 22. October 1994, pp. 819-825.

Pimental, D., A. Pleasant, et al. "U.S. Energy Conservation and Efficiency." Energy, Development, and Sustainability. V. 6, September 2004. pp. 279-306.

Scafidi, Catina M., and Anthony P. Curatola. "ETIA of 2005 and New Energy-Efficient Appliances." *Strategic Finance.* V. 87, June 2006. Montvale: pp. 16-18.

Sutherland, Ronald J. "Energy Efficiency or the Efficient Use of Energy Resources." *Energy Sources*, v. 16, 1994. pp. 257-268.

_. "The Economics of Energy Conservation Policy." *Energy Policy*, v. 24. April 1996, pp. 361-370.

U.S. Congress, House. Committee on Energy and Commerce. *National Energy Policy: Conservation and Energy Efficiency.* Hearings Before the

Subcommittee on Energy and Air Quality. Washington, DC: U.S. Government Printing Office, June 22, 2001.

U.S. Department of Energy. Lawrence Berkeley National Laboratory. "Energy Efficiency, Market Failures, and Government Policy." Levine, Mark D., et al. March 1994.

Young, Denise. "When Do Energy-Efficient Appliances Generate Energy Savings? Evidence from Canada." *Energy Policy*, v. 36. January 2008. pp.157-173.

TAX CREDIT FOR THE PURCHASE OF QUALIFIED ENERGY EFFICIENCY IMPROVEMENTS TO HOMES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.8	([1])	0.8
2009	0.3	([1])	0.3
2010	1.0	([1])	1.0
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1])Less than $50 million.

Authorization

Section 25C, 25D, and 45L.

Description

A 10% tax credit is provided to home owners for the *installation* of qualified energy efficiency improvements. Qualified improvements are defined as any energy efficient building envelope components that meet the criteria set by the 2000 International Energy Conservation Code and are installed in or on a dwelling unit owned and used as the taxpayer's principal residence. Building envelope components include: (1) insulation materials or other systems designed to reduce the heat loss or gain, (2) exterior windows (including skylights), (3) exterior doors, and (4) any metal roof that has coatings designed to reduce heat gain. A 100% tax credit is available for *expenditures* on selected residential energy efficient property such as water heaters or furnaces that meet certain energy efficiency standards. The maximum credit for a taxpayer with respect to the same dwelling is generally $500 except that specific items have separate limits: $200 for windows; $300 for qualifying electric heat pump water heaters, electric heat pumps,

central air conditioners, and natural gas, propane or oil water heaters; $150 for qualified natural gas, propane, or oil furnace or hot water boiler; and $50 for advanced main air circulating fans. Beginning on January 1, 2008 a $300 tax credit is also provided for energy-efficient biomass fuel stoves.

The basis of the property would be required to be reduced by the amount of the credit. Special proration rules are applied for jointly owned property, condominiums, and cooperative housing corporations, and where less than 80% of the property is used for nonbusiness purposes. Also, certain expenditures for labor are eligible. The credit for energy efficient home improvements was available from January 1, 2006 through December 31, 2007 and has now been extended by eight years through 2016. Note that improvements made in 2008 do not qualify for the credit.

A 30% credit, not to exceed $2,000, is provided for home owners that purchase and install photovoltaic property used exclusively for residential purposes. The $2,000 limit is repealed for installations made beginning in 2009. A separate 30% credit is provided for residential solar water heating property other than property heating swimming pools and hot tubs. At least half of the energy produced by the solar water heating property must be derived from the sun. Also a 30% tax credit is provided for small wind systems, limited to $4,000, and for geothermal heat pumps, limited to $2,000. Fuel cell power plants, also qualify for a 30% tax credit not to exceed $1,000 for each kilowatt of capacity. The power equipment must have a generation efficiency greater than 30% and a capacity of at least 0.5 kilowatts. The power plant must also be installed on or in connection with a dwelling unit located in the United States and that is used by the taxpayer as a principal residence. The depreciable basis of the property must be reduced by the amount of the credit. In addition, the credit applies to the basis remaining after subtracting any State subsidies (such as grants) or utility incentives claimed on the same property. Expenditures for labor costs are included. Certain equipment safety requirements must be met to qualify for the credit and special proration rules apply for jointly owned property, condominiums, and cooperative housing corporations, and where less than 80 percent of the property is used for nonbusiness purposes. All residential energy tax credits are effective for periods after December 31, 2005, and before January 1, 2017.

Under IRC §45L, a general business tax credit is available to eligible contractors for the construction of qualified new energy-efficient homes if the homes achieve an energy savings of 50% over the 2003 International Energy Conservation Code (IECC). An eligible contractor is the person who builds a qualified new energy efficient home, or manufactures a qualified new energy-efficient manufactured home. For manufactured homes, the required standard is a 30% energy savings over the 2003 IECC. Substantial construction of a qualified new energy efficient home must be completed after August 8, 2005, and the home must be acquired from an eligible contractor during 2006, 2007, 2008 or 2009 by a person for use as a

residence during the tax year. The term "construction" includes substantial reconstruction and rehabilitation, and the term "acquire" includes purchases. The home must also be located in the United States and meet the applicable energy-savings requirements. A manufactured home is a dwelling unit constructed in accordance with federal manufactured home construction and safety standards.

The amount of the new energy-efficient home credit depends on the energy savings achieved by the home relative to that of a 2003 IECC compliant comparable dwelling unit. The maximum credit is $2,000 for homes and manufactured homes that meet more rigorous energy requirements: a new home that has an annual heating and cooling energy consumption level that is at least 50% below the annual energy consumption level of a comparable dwelling unit. The credit is $1,000 for manufactured homes that meet a less demanding test: a home that is certified as having an annual heating and cooling energy consumption level that is at least 30% below the annual energy consumption level of a comparable dwelling unit. A qualified new energy efficient home must also receive a written certification that describes its energy-saving features (IRC §45L(d)).

The homebuilder's credit is a part of the general business credit and the taxpayer's basis in the property is reduced by the amount of any new energy efficient home credit allowed with respect to that property (IRC §38(b) and (23)). Expenditures taken into account under the rehabilitation and energy components of the investment tax credit are not taken into account under the new energy-efficient home credit (IRC §45L(f), as added by P.L. 109-58). The credit generally can be carried back for one year, and carried forward for 20 years, but it cannot be carried back to a tax year ending before 2006 (IRC §39). Any portion of the new energy efficient home credit that remains unused at the end of the carryover period may be deducted (IRC § 196(c)(13).

A contractor must obtain the certification required under §45L(c)(1) with respect to a dwelling unit (other than a manufactured home) from an eligible certifier before claiming the energy efficient home credit with respect to the dwelling unit. A contractor is not required to file the certification with the return on which the credit is claimed. However, §1.6001-1(a) of the Income Tax Regulations requires that taxpayers maintain such books and records as are sufficient to establish the entitlement to, and amount of, any credit claimed by the taxpayer. Accordingly, an eligible contractor claiming a $2,000 credit should retain the certification as part of the eligible contractor's records to satisfy this requirement.[16] This tax credit cannot be passed through to other taxpayers.

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[16]Internal Revenue Service. Notice 2006-27. *Internal Revenue Bulletin*. 2006-11, February 21, 2006.

Impact

These tax credits provide an investment subsidy to homeowners and builders who invest in a variety of home energy conserving equipment and materials, including (1) more energy-efficient heating or cooling systems, water heaters, or envelope component materials such as insulation and storm windows or (2) energy production systems such as solar or fuel cell systems. This subsidy helps to offset some of the purchase cost, which is generally higher than conventional energy equipment. The idea is to reduce the purchase price of qualifying equipment and thereby increase the rate of return or reduce its payback time. If the credits are to be effective, then the net present value of expected energy savings should equal the purchase price, net of the tax credits (or equivalently, the rate of return on the net purchase price should be higher than the opportunity cost of capital — the rate of return on the best alternative use of the capital outlay).

Rationale

These provisions were established by the Energy Policy Act of 2005 (P.L. 109-58) to encourage homeowners to retrofit their homes with energy efficient materials — materials and property that reduce the heat loss during winter and cooling loss during summer — and replace their energy using systems with either more energy efficient conventional systems or with solar energy or fuel cell systems. These tax credits are very similar to those enacted under the Energy Tax Act of 1978 (P.L. 96-518), which expired at the end of 1985. The 1978 tax credits were part of President Carter's National Energy Program. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) extended the residential renewable credit and the builders credit by one year through 2008. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) made the residential energy conservation tax credit available for 2009 and extended the builders tax credit by one year through 2009. Additionally, this legislation also extended the renewable residential tax credits by eight years through 2016.

More specifically, residential energy use for heating and cooling constitutes a significant fraction of total U.S. energy consumption, and therefore, measures to reduce heating and cooling requirements have the potential to reduce such consumption. Further, Congress believed that many existing homes are not adequately insulated. The tax credit for the construction of energy efficient homes is premised on the belief that the most cost-effective time to equip a home with energy efficient property is when it is under construction, and that the most effective mechanism to encourage the use of energy-efficient components in the construction of new homes is through an incentive to the builder. Reduced home energy consumption would reduce imported oil and pollution.

Assessment

From an economic perspective, allowing special tax credits for certain targeted activities can distort the allocation of resources, encouraging investments that would not otherwise be economical at current and expected prices and rates of return. Conversely, when home energy prices are high, many homeowners have sufficient financial incentives to undertake energy efficiency improvements without tax credits. This results in a windfall for many households — a financial reward for doing something that the person would have done anyway — at taxpayers' expense. This may not be a good use of taxpayer revenues, particularly during times of large budget deficits. Some recent data suggest that the demand for building insulation has increased rapidly due primarily to higher energy prices.

The credits for solar and fuel cells tend to favor middle and upper income households as the technologies are expensive and require large outlays of capital. Thus, they may be questionable on distributional grounds. Generally, these technologies require grid backup in most areas where they are installed, and their return may be low or even negative. Such tax credits are often justified on the grounds of energy conservation, where consumption of energy results in negative effects on society, such as pollution. In general, however, it would be more economically efficient to directly tax energy fuels than to subsidize a particular method of achieving conservation measures. Policymakers do not know which energy efficiency or renewable energy technologies are the most cost-effective, and often subsidized property is based on political rather than economic considerations leading to the misuse or waste of limited resources.

There are generally no acknowledged market failures in personal decisions to invest in energy efficient capital goods or property for the home; nor is there a market failure to provide or supply such goods or property by the business sector. The market generally works to supply such products and consumers readily invest in them as long as the rate of return is sufficient, which tends to be the case when home energy prices are high. There may be a market failure in decisions by builders to invest in appliances and other energy-using systems that equip a new home or building. The builder's incentive is to use the least costly, i.e., what may be the least energy efficient, appliance since this leads to a lower price and more profit for each dwelling unit sold; this could leave the home buyer or investor with higher monthly energy bills. Such a buyer of the new home might otherwise invest in the more expensive, but more energy saving appliances.

There may be a market failure in tenant-occupied homes, if the tenant pays energy bills separately. In rental housing, the tenant and the landlord lack strong financial incentives to invest in energy conservation equipment and materials, even when the benefits clearly outweigh the costs, because the benefits from such conservation may not entirely accrue to the party undertaking the energy-saving expenditure and effort. Builders and buyers

may also lack sufficient information (a problem which is discussed in more detail in Lazzari, CRS Report RL30406).

Selected Bibliography

Brown, Marilyn. "Market Failures and Barriers as a Basis for Clean Energy Policies," *Energy Policy*, v. 29. November 2001, pp. 1197-1207.

Clinch, J. Peter, and John D. Healy. "Cost-Benefit Analysis of Domestic Energy Efficiency." *Energy Policy*, v. 29. January 2000. pp.113-124.

Fisher, Anthony C., and Michael H. Rothkopf. "Market Failure and Energy Policy: A Rationale for Selective Conservation," *Energy Policy*, v. 17. August 1989, pp. 397-406.

Hahn, Robert W. "Energy Conservation: An Economic Perspective." American Enterprise Institute, October 2005.

Hassett, Kevin A., and Gilbert E. Metcalf. "Energy Conservation Investment: Do Consumers Discount the Future Correctly?" *Energy Policy*, v. 21. June 1993, pp. 710-716.

Howarth, Richard B., and Bo Anderson. "Market Barriers to Energy Efficiency." *Energy Economics,* October, 1993. pp. 262-292.

Laffie, Lesli S. "Home Builders Have New Tax Credit." *Journal of Accountancy*, v. 202. October 2006. pp.90-91.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: July 28, 2006.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

_. *Energy Tax Provisions in the Energy Policy Act of 1992*. Library of Congress, Congressional Research Service Report 94-525. Washington, DC: June 22, 1994.

Metcalf, Gilbert E. "Economics and Rational Conservation Policy." *Energy Policy*, v. 22. October 1994, pp. 819-825.

Pimental, D., A. Pleasant, et al. "U.S. Energy Conservation and Efficiency: Benefits and Costs." *Energy, Development, and Sustainability*. v. 6, September 2004. pp. 279-306.

Scafidi, Catina M., and Anthony P. Curatola. "ETIA of 2005 and New Energy-Efficient Appliances." *Strategic Finance.* V. 87, June 2006. Montvale: pp. 16-18.

Stern, Paul C. "Blind Spots in Policy Analysis: What Economics Doesn't Say About Energy Use." *Journal of Policy Analysis and Management*, v.5. April 1986, pp. 200-227.

Sutherland, Ronald J. "Energy Efficiency or the Efficient Use of Energy Resources." *Energy Sources*, v. 16, 1996. pp. 257-268.

Sutherland, Ronald J. "The Economics of Energy Conservation Policy." *Energy Policy*, v. 24. April 1996, pp. 361-370.

U.S. Congress, House. *Report to Accompany H.R. 776, the Comprehensive Energy Policy Act.* Washington, DC: U.S. Government Printing Office, Report 102-474, Part 6, pp. 35-37.

— . House. Committee on Energy and Commerce. *National Energy Policy: Conservation and Energy Efficiency.* Hearings Before the Subcommittee on Energy and Air Quality. Washington, DC: U.S. Government Printing Office, June 22, 2001.

U.S. Department of Energy. Lawrence Berkeley National Laboratory. "Energy Efficiency, Market Failures, and Government Policy." Levine, Mark D., et al. March 1994.

U.S. Department of the Treasury. Internal Revenue Service. *Credit for Nonbusiness Energy Property.* Notice 2006-26. March 13, 2006.

U.S. Department of the Treasury. Internal Revenue Service. *Certification of Energy Efficient Home Credit.* Notice 2006-27. March 13, 2006.

TAX CREDITS FOR ALCOHOL AND BIODIESEL FUELS

Estimated Revenue Loss*

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.1	0.1
2009	-	0.1	0.1
2010	-	0.1	0.1
2011	-	[1]	[1]
2012	-	-	-

* The figures exclude the revenue loss from the equivalent excise tax credit. The Joint Committee on Taxation estimates that the credits result in a reduction in excise tax receipts, net of income tax effect, of $13.6 billion over the FY2008-2012 period.

[1] Positive tax expenditure of less than $50 million.

Authorization

Section 38, 40, 40A, 87, 196, 6426.

Description

There are three income tax credits for alcohol-based motor fuels: the alcohol mixtures credit, the pure alcohol fuel credit, and the small ethanol producer credit. The existing alcohol mixture (or blender's) credit and the pure alcohol fuel credit is 51¢ per gallon of ethanol (60¢ for methanol) of at least 190 proof, and 37.78¢ for each gallon of alcohol between 150 and 190 proof (45¢ for methanol). No credit is available for alcohol that is less than 150 proof. The 51¢ credit was reduced from 52¢ on January 1, 2005. The alcohol mixtures credit is available to the blender (who typically is either the refiner, wholesale distributor or marketer); the pure (or "neat") alcohol credit may only be claimed by the consumer or retail seller. Generally, these tax credits expire on January 1, 2011.

The alcohol fuels mixtures tax credit is typically claimed as an instant excise tax credit that is equivalent to the excise tax exemption, and which may be claimed in lieu of the income tax credits. For 90/10 mixtures (90% gasoline, 10% ethanol) the excise tax credit is 5.1¢ per gallon of the blend — the blend is taxed at 13.3¢ per gallon, 5.1¢ less than the full rate of 18.4¢ per gallon on gasoline blends. The current 5.1¢ credit, which is equivalent to 51¢ per gallon of ethanol, is generally claimed up front on sales of gasoline loaded onto tanker trucks. Blenders prefer to claim the excise tax credit, rather than the income tax credit, because its benefits accrue immediately upon the purchase of the fuels for blending rather than when the tax return is filed. Also, the excise tax credit is not treated as taxable income, whereas the income tax credits have to be reported as taxable income, and are thus taxed. Before January 1, 2005, the primary tax subsidy for alcohol fuel blends was an excise tax exemption (at the rate of 5.2¢/gallon of blended fuels (mixtures of 10% ethanol, and 90% gasoline). This exemption was taken against the excise taxes otherwise due on each gallon of blended mixtures. This exemption, which was scheduled to decline to 5.1¢ on January 1, 2005, reduced the gasoline excise tax for "gasohol," from 18.4¢ to 13.2¢/gallon. Because the primary benefits from alcohol fuels were realized through an exemption rather than a tax credit, revenue losses (or reduced excise taxes) accrued to the Highway Trust Fund (HTF) rather than the general fund.

For fuel ethanol, current law also provides for a production tax credit in the amount of 10¢ per gallon of ethanol produced and sold for use as a transportation fuel. This credit, called the "small ethanol producer credit," is limited to the first 15 million gallons of annual alcohol production for each small producer, defined as one with an annual production capacity of under 60 million gallons. This is in addition to any blender's tax credit claimed on the same fuel. The small ethanol producer's tax credit currently flows through to the members of a farmers' cooperative, which means that the current system of ethanol incentives effectively is of no benefit to such cooperatives.

A 1990 IRS ruling allowed mixtures of gasoline and ETBE (Ethyl Tertiary Butyl Ether) to qualify for the 52¢ blender's credit. ETBE is a compound that results from a chemical reaction between ethanol (which must be produced from renewables under this ruling) and isobutylene. ETBE is technically feasible as a substitute for ethanol or MTBE (Methyl Tertiary Butyl Ether) as a source of oxygen in gasoline regulated under the Clean Air Act (CAA). Up until recently, MTBE was the preferred oxygenate, although ethanol was also used in some regions of the United States, particularly in the Midwest. MTBE has, however, been linked to groundwater contamination and has been banned in many States. The Energy Policy Act of 2005 (P.L. 109-58) repealed the oxygenate requirement for reformulated gasoline and imposed a renewable fuel standard, which effectively stimulates the use of ethanol in place of MTBE as a fuel additive.

The alcohol fuels income tax credits must be included as income, and are taxable, under IRC §87. Also, the alcohol credits are components of the general business credit and are subject to the limitations and the carry-back and carry-forward rules of that credit. Under tax code section 196, any credit amount that is unused because of these limitations may be claimed as a deduction in the subsequent tax year.

For biodiesel fuel, the structure of the tax subsidies is similar to those for fuel ethanol, although very little of these blends is actually produced. There are essentially three new tax credits: a credit for biodiesel fuel mixtures (blends of biodiesel and petroleum diesel), a credit for unblended (pure) biodiesel either used or sold at retail by the taxpayer, and a small biodiesel producer credit. Beginning on January 1, 2009, the biodiesel mixtures credit and pure biodiesel credit is $1.00 per gallon for both recycled oils and biodiesel made from virgin oils. Prior to that the credits were 50¢ per gallon of biodiesel made from recycled oils and $1.00 per gallon of biodiesel made from virgin oils — so called "agri"-biodiesel. The mixtures tax credit may also be claimed as an instant excise tax credit against the 24.4¢ per gallon tax on diesel blends. The mixtures credit is proportionate to the fraction of biodiesel in the mixture — a blend of 80% diesel with 20% virgin biodiesel would qualify for a 20¢/gallon tax credit against the 24.4¢ tax.

Also, effective on August 9, 2005, an "eligible small agri-biodiesel producer credit" of 10¢ is available for each gallon of "qualified agri-biodiesel production." An eligible "small agri-biodiesel producer" is defined as any person who, at all times during the taxable year, has annual productive capacity for agri-biodiesel not in excess of 60,000,000 gallons. The term "qualified agri-biodiesel production" would be defined as any agri-biodiesel, not to exceed 15,000,000 gallons, that: (1) the producer sells during the taxable year for use by the purchaser (a) in the production of a qualified biodiesel mixture in the purchaser's trade or business, (b) as a fuel in a trade or business, or (c) for sale at retail to another person who places the agri-biodiesel in that person's fuel tank; or (2) the producer uses or sells for any of such purposes. Aggregation rules are provided for determining the 15,000,000 and 60,000,000 gallon limits, for applying the limits to passthrough entities, and for allocating productive capacity among multiple persons with interests in one facility, and authorize anti-abuse regulations. The section also permits IRC §1381(a) cooperative organizations to elect to apportion the eligible small agri-biodiesel producer credit among their patrons, and would set forth the election procedure. The eligible small agri-biodiesel producer credit is effective for taxable years ending after August 8, 2005 and sunsets after December 31, 2009.

Thus, as of January 1, 2005, the reduced rates of excise taxes (i.e., the exemptions) for alcohol-blended fuels that were the principal tax incentives are repealed. Blenders instead will pay the full rate of tax on gasoline and diesel purchases (18.4¢ and 24.4¢, respectively) — and claim the respective tax credits on each gallon of ethanol and biodiesel intended to be blended

with gasoline and petroleum diesel, respectively. Taxpayers are to file a claim for a refund of these tax credits, which must be paid by the IRS within 45 days, after which interest begins to accrue. Both the restructured fuel ethanol tax credits and the new biodiesel tax credits are part of the general business credit and subject to its limits. The provisions restructuring the tax incentives for fuel ethanol and introducing the biodiesel tax credits are effective for fuel produced, sold, or used after December 31, 2004, and before January 1, 2011, for both biodiesel and fuel ethanol. This means that the biodiesel tax credits and the fuel ethanol blender's tax credits expire on these dates, respectively.

In all cases, the alcohol fuels tax credits apply to biomass ethanol (alcohol from renewable resources such as vegetative matter), and to methanol derived from biomass, including wood. Alcohol derived from petroleum, natural gas, or coal (including peat) does not qualify for either the current (or the restructured) tax credits or the current exemption. Most economically feasible methanol is derived primarily from natural gas; methanol from renewable resources is generally too costly to produce economically. The effect of this is to exclude most of actual methanol production from the tax incentives. However, methanol derived from methane gas produced from landfills is not alcohol produced from natural gas, and is included for credit purposes. About 90% of current biomass ethanol production is derived from corn. Most biodiesel is made from either recycled or virgin vegetable oil, but biodiesel made from animal fats also qualifies for the biodiesel tax credits. Agri-biodiesel is derived from virgin oils including esters derived from corn, soybeans, sunflower seeds, and other agricultural products.

Beginning on January 1, 2009, there is a new component to IRC §40: the cellulosic biofuel producer credit. This credit is a nonrefundable income tax credit for each gallon of qualified cellulosic fuel production of the producer for the taxable year. The amount of the credit per gallon is $1.01, except in the case of cellulosic biofuel that is alcohol. In the case of cellulosic biofuel that is alcohol, the $1.01 credit amount is reduced by (1) the credit amount applicable for such alcohol under the alcohol mixture credit as in effect at the time cellulosic biofuel is produced and (2) in the case of cellulosic biofuel that is ethanol, the credit amount for small ethanol producers as in effect at the time the cellulosic biofuel fuel is produced. The reduction applies regardless of whether the producer claims the alcohol mixture credit or small ethanol producer credit with respect to the cellulosic alcohol. When the alcohol mixture credit and small ethanol producer credit expire after December 31, 2010, cellulosic biofuel will receive the $1.01 without reduction.

Qualified cellulosic biofuel production is any cellulosic biofuel which is produced by the taxpayer and which is sold by the taxpayer to another person for use by such other person in the production of a qualified biofuel fuel mixture in such person's trade or business (other than casual off-farm production), for use by such other person as a fuel in a trade or business, or

who sells such biofuel at retail to another person and places such biofuel in the fuel tank of such other person, or is used by the producer for any purpose described in (a), (b), or (c).

Impact

The fuel ethanol tax subsidies increase the demand for ethanol, which further raises its price (on a before-tax basis) and increases the output of ethanol. After taxes, however, the net price of ethanol to the blender is comparable to the wholesale price of gasoline and to other blending components. Thus, the effect of the subsidies is to create a market for ethanol producers, such as Archer Daniels Midland, who supply the ethanol to the blenders. It should be noted that although ethanol producers do not claim the tax credits, the economic benefit of the subsidies accrues primarily to them. Most of the alcohol fuel produced in the United States is ethanol; about 90% of it is produced from corn, which is the cheapest feedstock.

Production of ethanol as a motor fuel, most of which is a gasoline blend, has increased from about 40 million gallons in 1979 to 1.7 billion gallons in 2001, 2.8 billion gallons in 2003, and 3.9 billion gallons in 2005. Ethanol production for 2007 is estimated at 6.5 billion gallons. This represents about 4.6% of the gasoline consumption of about 140 billion gallons, but at 10% blends, ethanol is now used in a significant fraction of the total gasoline market (currently about 30% of the gasoline sold in the United States contains 10% ethanol). The initial growth in ethanol production was mostly due to the federal excise tax exemption, the excise tax exemptions at the State and local level, tariffs on imported ethanol, and the high oil prices in the late 1970s and early 1980s, rather than to the alcohol fuels tax credits, which have been little used. More recently environmental policy — Clean Air Act requirements for reformulated and oxygenated fuels, the widespread banning of MTBE, and the establishment of a renewable fuels standard — have also increased demand for fuel ethanol. In addition to the various tax and regulatory subsidies for fuel ethanol, the Energy Policy Act of 2005 also established a mandate (the "renewable fuels standard") for refiners to use ethanol in certain proportions in place of other oxygenates such as MTBE. The standard for 2006 was 4.0 billion gallons of ethanol, 9 billion in 2008, and 15.2 billion gallons in 2012. The standard rises to 36 billion in 2022.

The banning of MTBE by many States and the repeal of the Clean Air Act's oxygenate requirement, and the renewable fuels standard are projected to further stimulate the production of ethanol for use as an oxygen source for reformulated gasoline, and thus to reduce the production and importation of alternate oxygen sources. As this occurs, it will increase the share of the U.S. corn crop allocated to ethanol production (13% in 2004). It is expected also to increase federal revenue losses from the alcohol fuels credits, which heretofore have been negligible due to blenders' use of the exemption over the credit.

Under the modified tax incentives, the ethanol blender's tax credits against the excise tax are roughly equivalent to the value of the excise tax exemption on each gallon of ethanol, but the tax restrictions under the general business credit, and the inclusion of the credit itself in income, will reduce the economic value of the tax credits. For biodiesel, however, which had no tax subsidies prior to the restructuring, the new tax credits are potentially of significant economic benefit, even with the requirement that they be taxable income.

Rationale

The alcohol fuels tax credits enacted in 1980 were intended to complement the excise-tax exemptions for alcohol fuels enacted in 1978. These exemptions provided the maximum tax benefit when the gasohol mixture was 90% gasoline and 10% alcohol. Subsequent tax law changes provided a prorated exemption to blends of 7.7% and 5.7% alcohol, so that ethanol used to meet the former CAA requirement for reformulated and the continuing requirement for oxygenated gasoline receives the maximum tax benefit. Under the restructured incentives and the mandate, these prorated exemptions will no longer be used.

Congress wanted the credits to provide incentives for the production and use of alcohol fuels in mixtures that contained less than 10% alcohol. Congress also wanted to give tax-exempt users (such as farmers) an incentive to use alcohol fuel mixtures instead of tax-exempt gasoline and diesel. Ethanol-blended gasoline leads to greater reductions in carbon monoxide than does MTBE-blended gasoline. Ethanol-blended gasoline, however, has relatively higher evaporative emissions, as compared with reformulated gasoline with MTBE, which cause increases in the ozone-forming potential of volatile organic compounds, which leads to increased ozone (smog) formation.

Both the credits and excise-tax exemptions were enacted to encourage the substitution of alcohol fuels produced from renewables for petroleum-based gasoline and diesel. The underlying policy objective is, as with many other energy tax incentives, to reduce reliance on imported petroleum. In addition, Congress wanted to help support farm incomes by finding another market for corn, sugar, and other agricultural products that are the basic raw materials for alcohol production. About 1.6 billion bushels of corn were used in 2005 to produce fuel ethanol, over 15% of the total corn crop. The increased demand for corn will raise the price of all corn and may increase annual income from corn farming by $5 billion or more. The rationale for the biodiesel tax credits is to provide tax incentives to create an environmentally friendly substitute for conventional diesel fuel, while also creating additional markets for farm products.

The alcohol fuels mixture credit and the pure alcohol fuels credit were enacted as part of the Crude Oil Windfall Profit Tax Act of 1980 (P.L. 96-223), at the rate of 40¢ per gallon for alcohol that was 190 proof or more, and 30¢ per gallon for alcohol between 150 and 190 proof. The credits were increased in 1982 and 1984. The Omnibus Reconciliation Act of 1990 (P.L. 101-508) reduced the credits to 54¢ and 40¢ and introduced the 10¢ per-gallon small ethanol producer credit. The Transportation Equity Act for the 21st Century (P.L. 105-178) reduced the blender's tax credit from 54¢ to its current rate of 52¢, and to 51¢ beginning in 2005.

The American Jobs Creation Act of 2004 (P.L. 108-357) reformed the tax incentives for fuel ethanol, by, in effect, treating the tax credits as if they were payments of excise tax liability. The rationale for the restructuring was to increase revenues for the Highway Trust Fund (HTF). Consumption of fuel ethanol blends results in revenue losses to the HTF in the amount of the 5.2¢ exemption times the quantity of fuel ethanol blends used. In addition, under tax code sections enacted in 1990, 2.5¢ of the taxable portion of the tax (the 13.2¢ for 90/10 fuel ethanol blends) was retained in the general fund. Thus, in total, the HTF lost, under previous law, 7.7¢/gallon of fuel ethanol blends (5.2¢ plus 2.5¢). Under the restructured incentives, tax revenue losses accrue to the general fund, rather than the HTF. The American Jobs Creation Act of 2004 also introduced the biodiesel fuel tax credits, and allowed, for the first time, the small ethanol producer's tax credit to flow through to members of a farmers' cooperative.

The Energy Policy Act of 2005 (P.L. 109-58) made several amendments to the tax subsidies for ethanol and biodiesel fuels. First, it raised the maximum annual alcohol production capacity for an eligible small ethanol producer from 30 million gallons to 60 million gallons. The provision also modified the election by a cooperative to allocate the credit to its patrons by conditioning the validity of the election on the cooperative's mailing a written notice of the allocation to its patrons during the period beginning on the first day of the taxable year covered by the election and ending with the fifteenth day of the ninth month following the close of that taxable year. Second, the Energy Policy Act of 2005 added the 10¢/gallon "eligible small agri-biodiesel producer credit" to the list of credits that comprise the biodiesel fuels credit. The Energy Policy Act also permitted cooperative organizations to elect to apportion the eligible small agri-biodiesel producer credit among their patrons, and set forth the election procedure. Another provision extended the existing income tax credit, excise tax credit, and payment incentives for biodiesel (which were enacted in 2004 under the "Jobs Bill") through December 31, 2010.

The Tax Relief and Health Care Act of 2006 (P.L. 109-432) 1) reduced the excise tax on ethanol and methanol fuels derived from coal; 2) extended the 54¢/gallon tariff on imported ethanol through January 1, 2009; and 3) allowed 50% of the capital costs of cellulosic ethanol plants to be expensed, deducted in the first year. The Food, Conservation, and Energy Act of 2008,

(P.L. 110-234, also known as the "farm bill"), made several changes to the tax incentives for alcohol fuels: First, it reduced the 51¢ ethanol tax credit, and 5.1¢ excise tax equivalent to 45¢ per gallon (equivalent to 4.5¢ per gallon of the 90/10 mixture) when total ethanol use (including cellulosic ethanol) reaches 7.5 billion gallons. This begins in 2009, and there is a lag of one year: a determination in 2008 would reduce the tax credits beginning in 2009. Second, the farm bill created a new, temporary cellulosic biofuels production tax credit for up to $1.01 per gallon, available through December 31, 2012. Third, it extended the tariff on imported ethanol another two years, through December 31, 2010. Finally, the farm bill reduced the fraction of an ethanol fuel mixture consisting of a denaturant, which effectively increases the fraction of a mixture which must consist of ethanol. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) expanded the 50% expensing of ethanol plant costs to include cellulosic biofuels generally, rather than only cellulosic ethanol. The law also 1) extends the $1.00 per gallon production tax credit for biodiesel and the 10¢/gallon credit for small biodiesel producers through 2009, 2) extends the $1.00 per gallon production tax credit for diesel fuel created from biomass, 3) eliminates the current-law disparity in credit for biodiesel and agri-biodiesel, and 4) eliminates the requirement that renewable diesel fuel must be produced using a thermal depolymerization process. As a result, the credit will be available for any diesel fuel created from biomass without regard to the process used, so long as the fuel is usable as home heating oil, as a fuel in vehicles, or as aviation jet fuel. Diesel fuel created by co-processing biomass with other feedstocks (e.g., petroleum) will be eligible for the 50¢/gallon tax credit for alternative fuels. Biodiesel imported and sold for export will not be eligible for the credit effective May 15, 2008.

Assessment

The alcohol fuels tax credits were enacted as part of President Carter's National Energy Program to increase the development and use of a domestic renewable fuel as a substitute for imported petroleum motor fuels, which account for the bulk of petroleum consumption and imports. The subsidies lower the cost of producing and marketing ethanol fuels that would otherwise not be competitive. They target one specific alternative fuel over many others — such as methanol, liquefied petroleum gas, compressed natural gas, or electricity — that could theoretically substitute for gasoline and diesel. Alcohol fuel is a more costly fuel or fuel additive, as compared with alternatives such as MTBE, especially when total resource costs, including revenue losses, are factored in. Alcohol fuels also require substantial energy to produce, thereby diminishing the net overall conservation effect.

These incentives originated as energy security measures — reducing dependence on petroleum imports — but their effect in expanding farm incomes (due to the increase in corn demand, and a higher corn price for all

corn output) has not been overlooked by policymakers. To the extent that the credits induce a substitution of domestically produced ethanol for petroleum-based motor fuels, they reduce petroleum imports and provide some environmental gains, although not necessarily more than other alternative fuels. So far, it is the excise tax exemptions, rather than the blender's credits, that have provided these stimulative effects.

At 51¢ per gallon of alcohol, the ethanol subsidy is approximately $22 per barrel of oil displaced (43% of the average domestic oil price of $51 in 2005); at $1.00/gallon of virgin biodiesel, the biodiesel subsidy is $42/barrel of displaced oil (82% of the 2005 crude price). Tax subsidies are generally an inefficient way of dealing with energy security or environmental concerns, and this is also the case with the alcohol and biodiesel fuels tax subsidies, which do not directly address the external costs of petroleum motor fuels production, use, and importation. Providing tax subsidies for one type of fuel over others could further distort market decisions and engender an inefficient allocation of resources, even if doing so produces some energy security and environmental benefits.

With a renewable fuels standard the tax credits no longer become incentives for demand and production, but increase profits for ethanol producers and farmers, raise costs for refiners (as ethanol prices increase), and increase fuel prices for consumers. This leads to not just substantial losses in federal tax revenue, but additional economic distortions in fuels and agricultural markets.

Selected Bibliography

Congressional Budget Office. *Budget Options*. Section 31: Curtail Income Tax Preferences for Businesses and Other Entities. February 2001.

Consumer Reports. *The Ethanol Myth*. Consumers Union of U.S., Inc. October 2006.

De Gorter, Harry and David R. Just. "The Welfare Economics of an Excise-Tax Exemption for Biofuels and Interaction with Farm Subsidies." Working Paper, Department of Applied Economics and Management, Cornell University. January 2008.

Downstream Alternatives, Inc. *Infrastructure Requirements for an Expanded Fuel Ethanol Industry*. January 15, 2002.

Evans, Michael K. *Economic Impact of the Demand for Ethanol.* Midwestern Governors' Conference. February 1997.

Fischer, Carolyn and Michael Toman. *Environmentally and Economically Damaging Subsidies: Concepts and Illustrations* (Climate Issue Brief #14). Resources for the Future, 2000.

Kane, Sally, John Reilly, Michael LeBlanc, and James Hrubovcak. "Ethanol's Role: An Economic Assessment," *Agribusiness*, v. 5. September 1989, pp. 505-522.

Kaplow, Doug. *Biofuels — At What Costs? Government Support for Ethanol and Biodiesel in the United States.* Prepared for the Global Studies Initiative of the International Institute for Sustainable Development. October 2006.

Lareau, Thomas J. "The Economics of Alternative Fuel Use: Substituting Methanol for Gasoline." *Contemporary Policy Issues*, v. 8. October 1990, pp. 138-155.

Lazzari, Salvatore. *Alcohol Fuels Tax Incentives*. Library of Congress, Congressional Research Service Report RL 32979. Washington, DC: July 6, 2005.

_.. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

Metcalf, Gilbert E. "Using Tax Expenditures to Achieve Energy Policy Goals." National Bureau of Economic Research Working Paper #13753, January 2008.

Organization for Economic Co-Operation and Development. *Economic Assessment of Biofuels Support Policies.* 2008.

The Renewable Fuels Association. *Industry Outlook: 2008.* February 2008.

U.S. Congress. House. Committee on Ways and Means. *Certain Tax and Trade Alcohol Fuel Initiatives*, Hearing, 101st Congress, 2nd session. Washington, DC: U.S. Government Printing Office, February 1, 1990.

—. Joint Committee on Taxation. *General Explanation of the Crude Oil Windfall Profit Tax Act of 1980 (H.R. 3919, P.L. 96-233)*, 96th Congress, 2nd session. Washington, DC: U.S. Government Printing Office.

U.S. Department of Energy. *Breaking the Biological Barriers to Cellulosic Ethanol: A Joint Research Agenda.* DOE/SC-0095. June 2006.

U.S. General Accounting Office. *Effects of the Alcohol Fuels Tax Incentives*, GAO/GGD-97-41. March 6, 1997.

U.S. General Accounting Office. *Biofuels: DOE Lacks A Strategic Approach to Coordinate Increasing Production With Infrastructure Development Vehicle Needs.* GAO-07-713. June 2007.

Yacobucci, Brent. *Fuel Ethanol: Background and Public Policy Issues*. Library of Congress, Congressional Research Service Report RL33290, Washington, DC: April 8, , 2008.

_. *Biofuels Incentives: A Summary of Federal Programs*. Library of Congress, Congressional Research Service Report RL33572, Washington, DC: July 29, 2008.

_. *"Boutique Fuels" and Reformulated Gasolines: Harmonization of Fuel Standards*. Library of Congress, Congressional Research Service Report RL31361, Washington, DC: May 10, 2006.

Energy

TAX CREDITS FOR ALTERNATIVE TECHNOLOGY VEHICLES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	[1]	0.2
2009	0.2	[1]	0.2
2010	0.2	[1]	0.2
2011	0.1	[1]	0.1
2012	[1]	[1]	[1]

([1])Less than $50 million.

Authorization

Section 30B and 30D.

Description

Section 30B provides for a system of nonrefundable tax credits for four types of so-called alternative technology motor vehicles: hybrid vehicles, advanced lean-burn technology vehicles, alternative fuel vehicles, and fuel cell vehicles. Section 30D provides a new nonrefundable tax credit for plug-in electric drive (hybrid) vehicles. Advanced technology vehicles (ATVs) may use either an alternative fuel or a conventional fuel (such as diesel) more efficiently. In general, they are less polluting than standard (non- advanced) motor vehicles. For each of the four vehicle types, the amount of the credits depend on vehicle weight class (passenger and light truck vs. heavy duty trucks) and either estimated lifetime fuel savings or the incremental (marginal) cost of the technology. Generally, these credits expire at the end of December 31, 2010, except for fuel cell vehicles, which expire at the end of December 31, 2014.

Hybrid Vehicles and Advanced Lean-Burn Technology Vehicles. For hybrid and advanced lean- burn technology vehicles weighing less than 8,500 pounds (i.e., for passenger cars or light trucks), the total credit consists of two components: a fuel economy credit, which ranges from $400-$2,400 depending on the rated city fuel economy of the vehicle, and a conservation credit, which ranges from $250-$1,000 depending on estimated lifetime fuel savings. For both components, the comparison is made with a comparable 2002 model year standard gasoline powered vehicle. In addition, the conservation credit is based on the estimated lifetime fuel savings between the two vehicles assumed to travel 120,000 miles.

For qualified hybrid and advanced lean-burn technology vehicles weighing 8,500 lbs or more, the credit is either 20, 30, or 40 percent of the marginal cost of the vehicle's advanced technology, subject to certain limits based on the precise vehicle weight. The precise percentage depends on the vehicle's fuel economy relative to a comparable gasoline or diesel powered vehicle. The marginal cost of the hybrid vehicle is the difference in the suggested manufacturer selling price between the hybrid vehicle and a gasoline or diesel powered vehicle comparable in weight, size, and use, as determined and certified by the manufacturer.

In the case of hybrids and advanced lean-burn vehicles, there is a cumulative 60,000 limit imposed on the number of vehicles (all models of the hybrid or lean-burn type) sold by each manufacturer that are eligible for the credit. Once the cumulative limit is reached for either technology, the credit for that manufacturer begins to phase out during the second quarter after the limit is reached and is completely phased out — no credit is available — after the sixth quarter (the fourth quarter after the phase-out begins). The credit is available for imported vehicles, but no credit is allowed for any vehicle used outside of the United States.

Hybrid vehicles are defined as motor vehicles that draw propulsion energy from two onboard sources of stored energy: an internal combustion or heat engine using consumable fuel, and a rechargeable energy storage system. A qualifying hybrid vehicle must meet the applicable regulations under the Clean Air Act. For a vehicle with a gross vehicle weight rating of 6,000 pounds or less (passenger cars and many light trucks), the applicable emissions standards are the Bin 5 Tier II emissions standards of the Clean Air Act. For a vehicle with a gross vehicle weight rating greater than 6,000 pounds and less than or equal to 8,500 pounds, the applicable emissions standards are the Bin 8 Tier II emissions standards. The tax credit for hybrid vehicles is available for vehicles purchased after December 31, 2005, and before January 1, 2010. A qualifying advanced lean-burn technology motor vehicle is one that incorporates direct injection, and achieves at least 125 percent of the 2002 model year city fuel economy. The 2004 and later model vehicles must meet or exceed certain Environmental Protection Agency emissions standards. A qualifying advanced lean-burn technology motor vehicle must be placed in service before January 1, 2011.

Alternative Fuel Vehicles. The credit for new qualified alternative fuel motor vehicles is generally equal to 50 percent of the incremental cost of the technology, relative to a conventionally powered vehicle of the same class and size. The incremental cost depends on the vehicle's weight. However, a bonus credit of 30 percent is also provided for alternative fuel vehicles that also meet certain EPA emission standards. In all cases, the credit cannot exceed $4,000-$32,000 per vehicle depending on vehicle weight. A new qualified alternative fuel motor vehicle is defined as a motor vehicle that is capable of operating on an alternative fuel, defined as compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen, and any liquid at least 85 percent of the volume of which consists of methanol. A reduced credit is available for mixed-fuel (flexible fuel) vehicles. The vehicle must be new and acquired by the taxpayer for use or lease, but nor for resale. The new credit for alternative fuel vehicles applies to purchases made between January 1, 2006, and December 31, 2010. Alternative fuels also receive favorable tax treatment — a 50¢/gallon equivalent of gasoline tax credits — against the federal excise tax. Automakers also get credit toward meeting fuel economy standards by producing alternative fuel vehicles.

Fuel Cell Vehicles. The credit for fuel cell vehicles ranges from $8,000 ($4,000 if placed in service after 2009) to $40,000, depending on vehicle weight. If the new qualified fuel cell motor vehicle is a passenger automobile or light truck, the amount of the credit is increased if certain fuel efficiencies are met based on the 2002 model year city fuel economy for specified weight classes. A new qualified fuel cell motor vehicle is defined as a motor vehicle: (1) that is propelled by power derived from one or more cells that convert chemical energy into electricity by combining oxygen and hydrogen fuel that is stored on board the vehicle in any form; (2) that, in the case of a passenger automobile or light truck, receives an EPA certification; (3) the original use of which commences with the taxpayer; (4) that is acquired for use or lease by the taxpayer and not for resale; and (5) is made by a manufacturer. The new credit for fuel cell vehicles applies to purchases made between January 1, 2006, and December 31, 2014.

For all of the above ATV types, businesses may qualify for the credits and the vehicles also qualify for depreciation treatment, although there are limits on the annual depreciation deductions, and the cost basis is reduced by the credit. Also, while the credits are available for the purchaser, in the event of a sale to a governmental agency or a tax-exempt organization — entities that pay no income tax, and therefore cannot benefit from the credits — the seller of the vehicle would receive the credit.

Plug-In Hybrid Vehicles. The credit for plug-in hybrids consists of a base amount of $2,500 and a graduated credit consisting of $417 for each kilowatt hr of battery capacity in excess of 4 kilowatts. The maximum credit ranges from $7,500 to $15,000 depending on the weight of the vehicle. Taxpayers may claim the full amount of the allowable credit up to the end of the first calendar quarter after the quarter in which the total number of

qualified plug-in electric drive vehicles sold in the U.S. is at least 250,000. The credit is available against the alternative minimum tax (AMT). A plug-in hybrid is similar to a standard hybrid vehicle, but its battery capacity is much larger and it is recharged by plugging in the vehicle to a standard electrical outlet, as compared with a standard hybrid, which has an on-board recharge system.

Electric Vehicles. Finally, a 10 percent tax credit is available for the cost of an electric vehicle up to a maximum credit of $4,000. However, under phase-out provisions, only 25 percent of this credit ($1,000) is available in 2006. No credit is available after 2006. This credit has been available since 1992; the above advanced technology vehicles credits were enacted in 2005.

Impact

Substantial economic research over the years has demonstrated that lack of consumer demand for ATVs is the primary reason for the lack of market for these types of vehicles. This lack of consumer demand for ATVs, in turn, is generally due to five variables: 1) the high fixed, up-front costs (or purchase price) for the vehicle itself relative to the price of conventional vehicles; 2) the historically low price (real, inflation adjusted prices) of conventional fuels generally, and in relevant cases, the price of conventional fuels in relationship to the price of alternative fuels; 3) the variability in the price of oil, which translates into variability in the price of gasoline and diesel, and which increases the risk of alternative fuel investment and development, independent of the level of conventional fuels prices; 4) the additional risks associated with investing in or purchasing a relatively new, unknown, and unproven technology; and 5) the utility that consumers derive from an automobile's features that ATVs generally cannot provide at this time (due in various cases to poorer acceleration, smaller capacity, fewer refueling locations, possibly higher maintenance costs, and fewer model options).

The new tax credits for the purchase of ATVs attempt to address one of these variables: the price of the vehicles. The credits should lead to a reduction in the price of the vehicles, relative to the price of conventional vehicles and increase the demand for them. The magnitude of the potential increase in consumer demand depends upon the magnitude of the price decline in response to the tax incentives and the price elasticity of demand for ATVs. These are basically unknown parameters at this time, but it seems reasonable that given the currently high costs of ATVs, current consumer demand is probably relatively elastic, which implies a sizeable responsiveness to potential price declines, if they actually take place.

The new tax credits may also stimulate business investments in ATVs. A business's decision to invest is determined by three variables: 1) the rate of depreciation of its existing capital; 2) the demand for its output; and 3) the

rate of return, after tax, on prospective investments. Assuming a given rate of depreciation and a continued market for its product, the decision to invest in any particular machine, equipment, or even a vehicle is determined by the after-tax rate of return on that prospective investment as compared to the cost of capital (which is basically the opportunity cost of capital, or the return on the best foregone investment alternative). Tax policy variables — the marginal statutory tax rate (including the alternative minimum tax), the effective investment tax credit, the system of depreciation, including any accelerated depreciation; the fraction of interest payments that are tax deductible; and effective tax rate on capital gains — all affect investment decisions through their effect on the marginal effective tax rate. The ATV credits are thus one of several variables that could affect the effective income tax rate on the marginal investment. The credit increases the after-tax returns, which tends to stimulate investment demand, other things being equal. (Note that in both personal and business ATVs, future price declines in response to R&D tax incentives could increase the degree of responsiveness to the demand curve for ATVs.) However, under current depreciation rules there are two limitations as they apply to automobiles that may reduce the incentive effects of the ATV credits for businesses. First, there is a limit on the amount of a passenger vehicle that may be expensed under IRC section 179. Second, there is a limit on the amount of a luxury automobile — ATVs would be classified as passenger automobiles for this purpose — that does not apply to a truck or SUV. Thus, a business taxpayer that buys an SUV is not subject to these depreciation limits, while one that buys an ATV is.

Finally, to the extent that the credits are effective in increasing demand for ATVs, there is a decline in petroleum use and importation. Fuel consumed in conventional motor vehicles accounts for the largest fraction of total petroleum consumption and is a leading source of dependence on foreign oil. ATVs are also generally less polluting, producing significantly lower total fuel cycle emissions when compared to equivalently sized conventional vehicles.

Rationale

Section 30B was enacted as part of the Energy Policy Act of 2005 (P.L. 109-58) to stimulate the demand for more fuel efficient and environmentally clean automobiles. Section 30D was enacted by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343), to further stimulate the demand for another type of alternative technology vehicle: the plug-in hybrid, which is envisioned as a more fuel efficient and environmentally clean automobile as compared with conventional vehicles. The Congress believed that further investments in alternative fuel and ATVs are necessary to transform the mode of transportation in the United States toward more clean fuel efficient vehicles, relying less on petroleum. This would reduce petroleum consumption and importation, which endangers U. S. energy and economic

security. In this regard, hybrids and alternative fueled vehicles (e.g., ethanol fueled vehicles) were viewed as the short term options; advanced lean-burn and fuel cell vehicles were viewed as the long-term options. The Energy Policy Act of 1992 (P.L. 102-486) introduced a $2,000 tax deduction for passenger vehicles that run on alternative fuels (up to a $50,000 for heavy duty trucks), and also established a tax credit for electric vehicles. Under an administrative ruling by the Internal Revenue Service (Revenue Procedure 2002-42), purchasers of model year 2000-2006 hybrid vehicles were allowed to claim the clean-fuel vehicle deduction, which expired on January 1, 2006.

Both the $4,000 electric car credit, and the alternative fuel vehicle deduction were subject to a phase out evenly over a 3-year period beginning in 2004 and ending in 2006. This original phase-down schedule was modified in the Job Creation and Worker Assistance Act of 2002, which extended it from the 2002-2004 period to the 2004-2006 period. Early versions of the Jobs and Growth Tax Relief Reconciliation Act of 2003 proposed to further extend the phase-down period to the 2005-2007 three-year period, but the provision was dropped from the bill. The Energy Policy Act of 2005 allowed the deduction to sunset at the end of 2005; (the electric vehicle tax credit sunset in 2006) and replaced the deduction and electric vehicle credit with the tax credits under IRC §30B for the four types of ATV's. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) allowed a fifth type of ATV — the plug-in hybrid vehicle — to qualify for income tax credits under a separate section of the tax code, IRC §30D.

Assessment

From 2000-2006 the demand for hybrid passenger automobiles (particularly, the demand for the Toyota Prius and Honda Insight) increased rapidly, mostly in response to the rapid runup of gasoline prices but also at least in part due to the incentive effects of the $2,000 federal deduction. Hybrid vehicles are priced somewhat higher than gasoline-powered cars of comparable size and quality, but the $2,000 tax deduction reduced the net price to the point that they became competitive. Also, there are numerous Federal, State, and local government programs (such as fleet requirements) that have stimulated the use of hybrids (and, in some cases, alternative fuel vehicles).

As to the effects of the new tax credits, which replaced the deduction, the presumption is that they have had some stimulative effect. Toyota, for example, reached the 60,000 vehicle limit by the second quarter of 2006, three and one-half years before the expiration of the hybrid credit. Still, while the ATV tax credits had some effect on demand for hybrids, it is difficult (and probably premature) to assess the relative effects of the tax credits and the recent high petroleum prices on the demand for hybrids. The importance of petroleum prices is further suggested, however, by the

following evidence: 1) despite the phase-down of the deduction, which began on January 1, 2004, the demand for hybrids stayed at fairly sustained levels, and even increased before January 1, 2006, the date that the new tax credits became effective; and 2) the demand for the larger, and less fuel efficient, hybrids such as hybrid Sport Utility Vehicles has been less than the smaller hybrids. With the exception of hybrid cars, relatively few ATVs have been sold that qualify for the deduction. The limited availability of fuel cell, advanced lean-burn vehicles, and other ATVs, and the 60,000 output limit on the number of creditable hybrids means that the tax credits will likely have little direct impact on the total U.S. demand for transportation petroleum demand. With the exception of Toyota and Honda, other hybrid manufacturers have not reached the 60,000 limit, which means that the tax credits for the purchasers of their hybrids should continue to be available.

There is also a concern that the credits have favored foreign at the expense of domestic auto manufactures, because the demand for hybrids has been met primarily by imports. Very few of the hybrid vehicles receiving the tax credits have been manufactured by domestic auto companies. In the short run, domestic automobile companies have favored production of flexible-fuel vehicles (particularly vehicles that can use E85 — mixtures of 15 percent gasoline and 85 percent ethanol) rather than hybrids; in the long run they appear to be putting their research and development efforts (and spending) into hydrogen fuel-cell technologies, which create electricity through an electrochemical reaction between hydrogen and oxygen. Given the current rudimentary state of development of fuel cell vehicles and hydrogen fueling infrastructure required for their use, and given the many technological and cost barriers to this development, however, it is unlikely that the tax credit for fuel cell vehicles will stimulate much demand. However, if these problems could be addressed, then tax credits that reduce the price of fuel cell vehicles to the comparable gasoline vehicle price could stimulate demand for fuel cells and reduce petroleum consumption. To the extent that the ATV credits accrue to flexible fuel vehicles there is some concern that consumers will continue to use gasoline in those vehicles rather than E85. Available data suggest that very few such vehicles actually use E85, which is not only more expensive than gasoline, but is scarce due to the lack of supply infrastructure. This means that, in effect, the ATV tax credits are actually encouraging the demand for conventionally powered domestic vehicles.

From an economic perspective, allowing special tax credits for selected technologies (and not others) distorts the allocation of resources — it creates economic inefficiencies and distortions. It encourages investments in high cost technologies, ones that would not otherwise be economical at current and expected prices and rates of return. For businesses this requires retooling and the cost of commercialization. Some data indicate that the cost of hybrids is greater than the retail selling price — that manufacturers are losing money on hybrids. This cost premium is, in part, due to the higher cost of hybrid power train components. Conversely, when motor fuel prices are

high, many motorists have sufficient financial incentives to purchase more fuel efficient vehicles, such as hybrids, without tax credits. This results in a windfall for many consumers — a financial reward for undertaking investments that would have been undertaken even without the credits — at taxpayer's expense. This may not be a good use of taxpayer revenues, particularly during times of large federal budget deficits.

Some of the ATVs that qualify for the tax credits are not only imported but are very expensive and would tend to be purchased by upper income households or businesses, which raise questions of the distributional effects of the credits: such an imported vehicle may sell for $55,000 or more. The credits might tend to favor middle and upper income households, or businesses that have the income and wealth to invest in such expensive ATVs. Such tax credits are often justified on the grounds of energy conservation, if consumption of energy resulted in negative effects on society, such as pollution. In general, however, it would be more efficient to directly tax energy motor fuels or gas guzzlers than to subsidize a particular method of achieving conservation measures.

Selected Bibliography

Bearden, David M. *EPA's Tier 2 Emission Standards for New Motor Vehicles: A Fact Sheet,* U.S. Library of Congress. Congressional Research Service. CRS Report RS20247. June 12, 2000.

European Commission. *Urban Transport: Options for Propulsion Systems and Instruments for Analysis.* March 22, 2001. (Contract No. UR-97-SC-2076), p. 64, 65.

Fisher, Anthony C., and Michael H. Rothkopf. "Market Failure and Energy Policy: A Rationale for Selective Conservation," *Energy Policy*, v. 17. August 1989, pp. 397-406.

Graham, R. *Comparing the Benefits and Impact of Hybrid Electric Vehicle Options.* EPRI Report # 1000349. July 2001.

Hahn, Robert W. "Energy Conservation: An Economic Perspective." American Enterprise Institute, October 2005.

Hassett, Kevin A., and Gilbert E. Metcalf. "Energy Conservation Investment: Do Consumers Discount the Future Correctly?" *Energy Policy*, v. 21. June 1993, pp. 710-716.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: July 28, 2006.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 32265. Washington, DC: March 10, 2004.

_. *Benefits and Costs of the Federal Tax Credit for Hybrid Vehicles.* Library of Congress, Congressional Research Service. Washington, DC: August 16, 2007.

_. *Expired and Expiring Energy Tax Incentives*. Library of Congress, Congressional Research Service Report 94-525. Washington, DC: June 22, 1994.

Metcalf, Gilbert E. "Economics and Rational Conservation Policy." *Energy Policy*, v. 22. October 1994, pp. 819-825.

Pimental, D., and A. Pleasant, et al. "U.S. Energy Conservation and Efficiency." Energy, Development, and Sustainability. v. 6, September 2004. pp. 279-306.

Sutherland, Ronald J. "Energy Efficiency or the Efficient Use of Energy Resources." *Energy Sources*, v. 16, 1994. pp. 257-268.

Sutherland, Ronald J. "The Economics of Energy Conservation Policy." *Energy Policy*, v. 24. April 1996, pp. 361-370.

U.S. Department of Energy. *TAFV Alternative Fuels and Vehicle Choice Model Documentation.* Prepared for Oak Ridge National Laboratory (ORNL/TM-2001/134), by David L. Greene. July, 2001.

U.S. Department of the Treasury. Internal Revenue Service. *IRS News Release: IR-2006-145*. September 20, 2006.

U.S. Department of the Treasury. Internal Revenue Service. *IRS Notice: 2006-78*. Cumulative Bulletin 2006-41. October 10, 2006.

U.S. Department of the Treasury. Internal Revenue Service. *IRS News Release: IR-2008-113 on Vehicles Certified as Qualified Advanced Lean-Burn Technology Vehicles.* October 6, 2008.

Yacobucci, Brent. *Alternative Transportation Fuels and Vehicles: Energy, Environment, and Developmental Issues*. U.S. Library of Congress. Congressional Research Service. CRS Report RL 30758, January 7, 2005.

_Yacobucci, Brent. *Advanced Vehicle Technologies: Energy, Environment, and Developmental Issues*. U.S. Library of Congress: Congressional Research Service. CRS Report RL 30484, December 6, 2007.

Yacobucci, Brent. *Tax Incentives for Alternative and Advanced Technology Vehicles*. U.S. Library of Congress: Congressional Research Service. CRS Report RS 22351, December 19, 2005.

TAX CREDIT FOR ENHANCED RECOVERY COSTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 43.

Description

Section 43 provides for a 15% income tax credit for the costs of recovering domestic oil by a qualified "enhanced-oil-recovery" (EOR) methods. Qualifying methods apply fluids, gases, and other chemicals into an oil reservoir, and use heat to extract oil that is too viscous to be extracted by conventional primary and secondary water-flooding techniques.

Nine tertiary recovery methods listed by the Department of Energy in section 212.78(c) of its June 1979 regulations qualify for the tax credit: miscible fluid displacement, steam-drive injection, micro-emulsion flooding, *in-situ* combustion, polymer-augmented water flooding, cyclic steam injection, alkaline (or caustic) flooding, carbonated water flooding, and immiscible carbon dioxide (CO_2) gas displacement. Another technique, immiscible non-hydrocarbon gas displacement, was added later.

Qualifying EOR costs include the following costs, which are associated with an EOR project: 1) the costs of tangible equipment — equipment that would otherwise qualify for depreciation; 2) intangible drilling and development costs (*i.e.*, labor, supplies and repairs); and 3) the costs of the injectants. For purposes of the credit, the costs of the injectants include expenditures related to the use of a tertiary injectant as well as expenditures related to the acquisition (whether produced or acquired by the purchaser) of the tertiary injectant. The project must be located in the United States, and involve the application of sound engineering principles (as certified by a petroleum engineer).

Effective January 1, 2005, the cost of constructing a natural gas processing plant in the Alaska North Slope qualifies for the 15% EOR credit. The plant must be capable of processing at least 2 trillion Btu's of Alaskan natural gas into the natural gas pipeline system every day, and must produce carbon dioxide for reinjection into a producing oil or gas field.

The EOR credit is allowable provided that the average wellhead price of crude oil (using West Texas Intermediate as the reference) in the year before credit is claimed, is below the statutorily established threshold price of $28 (as adjusted for inflation since 1990), in the year the credit is claimed. The EOR credit is phased out over a $6 range, proportionately as the average wellhead price — this is referred to as the reference price — rises from the inflation-adjusted threshold price plus $6/barrel. Thus, had the price of West Texas intermediate oil been above $36.27 (when the phase-out range would have been $36.27-$42.27), the EOR credit for 2004 would have been reduced by the proportion this excess represented to $6. To illustrate, had oil prices averaged $39.27/barrel in 2003, the EOR credit would have been reduced by 50% [($39.27 - $36.27)/$6]. For 2007, average wellhead oil price for oil at $66.52, and above $41.06 ($28 times the inflation adjustment factor of 1.4222 for 2007), the EOR credit is fully phased out in 2007 (it was also phased-out for 2006).

The EOR credit is nonrefundable, which means that it is limited to the amount of a taxpayer's regular tax liability. In addition, because the EOR credit is claimed as part of the general business credit, it is also subject to those limits, which generally reduce the economic value of the tax credit. Thus, the EOR credit may not be greater than a taxpayer's net income tax in excess of 25% of net regular tax liability above $25,000, or the tentative minimum tax. The cost of the property that may otherwise be deducted as depreciation, depletion, or amortization (as the case may be) is reduced by the amount of the credit. Alternative fuel production credits attributable to the property are also reduced by the EOR credit. Finally, the EOR credit cannot be claimed against the alternative minimum tax.

Impact

Conventional oil recovery methods typically succeed in extracting only about 30% of a reservoir's oil: 10% during the primary recovery stage; 20% during the subsequent secondary recovery stage. This varies significantly depending on individual field characteristics. Some of the remaining oil can be extracted by unconventional recovery methods, such as EOR methods, but these methods are currently uneconomic at oil prices below about $28-30 per barrel because EOR is more costly than conventional oil recovery. The EOR credit reduces the cost of producing oil from older abandoned reservoirs relative to the cost of producing oil from new reservoirs, and creates an economic incentive to increase production of otherwise abandoned oil, which adds to the domestic supply of oil. About 60% of EOR projects use thermal techniques (these are primarily in California), nearly 40% use gas injection techniques, and less than 1% use chemical techniques.

Rationale

The EOR credit was enacted as part of the Omnibus Budget Reconciliation Act of 1990 to increase the domestic supply of oil, to reduce the demand for imported oil, to make the United States less dependent upon Persian Gulf producers and other unreliable foreign oil producers, and to enhance the energy security of the United States. Another motive for this provision may have been to help the oil and gas industry, which had, at the time, not fully recovered from the 1986 oil price collapse. The Crude Oil Windfall Profits Tax of 1980 (P.L. 96-223) provided that some EOR costs would be deductible in the year incurred, rather than capitalized; prior to this legislation tax law treatment — whether EOR expenses should be deductible or capitalized — was unclear. The American Jobs Creation Act of 2004 (H.R. 4520) expanded the EOR credit to include Alaskan natural gas processing plant expenses. (Natural gas needs to be treated prior to injection into a pipeline to remove any propane, CO2, sulfur, and other contaminants, which hinder its ability to be transported via pipeline). This expansion was part of a broader package of tax incentives and loan guarantees for a natural gas pipeline from Alaska's North Slope to the Lower 48 States.

Assessment

The decline of domestic oil production and increased petroleum imports is a constant reminder of the United States' dependence on foreign oil supplies. EOR holds considerable promise for recovering billions of barrels of oil still residing in abandoned oil fields. Oil production in the United States, which peaked in 1970 and has since declined by about 50%, has continued to drop in recent years. Foreign oil supplies now account for about 60% U.S. oil demand. The United States, once the world's leading oil

producer and exporter, has been depleting its oil reservoirs and is now the high-marginal-cost oil producer.

U.S. production of oil by EOR methods has nearly doubled over the last 20 years, growing from about 450,000 barrels per day to nearly 800,000 barrels per day in 2003. At that level, EOR production comprises about 13% of total domestic production. While much of that output uses thermal techniques, the use of CO2 injection processes is projected to increase sharply, according to the U.S. Department of Energy: from 350,000 barrels per day in 2006, to 1.3 million barrels per day in 2030. The CO2 sequestration option for reducing global warming — collecting the CO2 at its source and either storing it or using it to recover EOR oil — may further increase oil production by EOR techniques. The smaller percentage decline in EOR oil output relative to conventional oil means that EOR oil output will grow somewhat over the next 10 years as a fraction of total domestic production. It is estimated, however, that nearly 400 billion barrels of oil (nearly half of the estimated total oil reserves in place and more than double cumulative U.S. production since the first oil well was discovered and produced) remain in abandoned reservoirs, significantly more than the known reserves of oil recoverable by conventional primary and secondary methods. Further, it is estimated that 10% of that oil consists of known recoverable reserves that could be produced with current EOR techniques if the financial incentives were there.

The incentive effect of the EOR credit should, in time, and assuming a decline in oil prices and the availability of the credit, increase the recovery of this oil, which would increase the domestic supply of oil and tend to reduce the level of imported oil. It is unlikely, however, to reverse the long-term slide in domestic production and growing dependence on imports. The United States is more dependent on imported oil, but is less vulnerable to supply disruptions and oil price shocks, due to the stockpiling of oil under the Strategic Petroleum Reserve, the diminished relative importance of petroleum in the general economy, the weakened market power of the Organization of Petroleum Exporting Countries (OPEC), and increased competitiveness in world oil markets. Increased domestic oil production lessens short-term dependency but encourages long-term dependency as domestic resources are depleted. EOR oil is more expensive to recover than conventional oil but is a relatively inexpensive way to add additional oil reserves.

Selected Bibliography

Karnes, Allan, James B. King, Phillip G. Neal, and Richard Rivers. "An Attempt to Spur Tertiary Recovery Methods: The Enhanced Oil Recovery Credit of IRC Section 43," *Oil and Gas Tax Quarterly*, v. 40. June 1992, pp. 695-703.

Lazzari, Salvatore. *Federal Tax Incentives for CO2 Pipelines*. Library of Congress. Congressional Research Service. Washington, D.C. 2007.

Moritis, Guntis. "EOR Increases 24 Percent Worldwide; Claims 10 Percent of U.S. Production," *Oil and Gas Journal*, v. 90. April 20, 1992, pp. 51-79.

—. "EOR Weathers Low Oil Prices," *Oil and Gas Journal*, v. 98. March 20, 2000, pp. 39-61.

Price, John E. "Accounting for the Cost of Injection Wells and Injectants in Secondary and Tertiary Recovery Efforts," *Oil and Gas Tax Quarterly*, v. 37. March 1989, pp. 519-534.

McIntyre, Robert S., and T.D. Coo Nguyen. "Corporate Income Taxes in the 1990s," *Institute on Taxation and Economic Policy*. October 2000.

McAllister, Ted. "Impact of Unconventional Gas Technology in the Annual Energy Outlook 2000," Energy Information Administration, Annual Energy Outlook, 2000. DOE/EIA-0383 (2000), December 1999.

Norman, Chuck. "CO(2) for EOR is Plentiful But Tied to Oil Price," *Oil and Gas Journal,* v. 92. February 7, 1994, pp. 44-49.

Soot, Peet M. "Tax Incentives Spur Development of Coalbed Methane," *Oil and Gas Journal*, v. 89. June 10, 1991, pp. 40-42.

"Special Report: Enhanced Oil Recovery — 2002 Worldwide EOR Survey," *Oil and Gas Journal*, v. 100. April 15, 2002, pp. 71-83.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Crude Oil Windfall Profit Tax Act of 1980,* 96th Congress, 2nd session. 1980: pp. 80-84.

U.S. Congress, Joint Committee on Taxation. *JCT Description of Federal Energy Tax Provisions Prepared for Senate Finance Committee Hearings.* Hearings Before the Senate Finance Committee, 107st Congress, 1st session. Washington, DC: U.S. Government Printing Office, July 9, 2001.

U.S. Department of Energy. Energy Information Administration. *Analysis of Selected Tax Provisions of the Conference Energy Bill of 2003.* SR/OIF/2004-01, February 2004.

U.S. Department of Energy. Energy Information Administration. *Annual Energy Outlook 2008.* DOE/EIA-0383(2008), June 2008.

U.S. Department of Energy. Office of Fossil Energy. *Enhanced Oil Recovery/CO2 Injection*. October 22, 2003. http:\www.fe.doe.gov/programs/oilgas/eor/.

U.S. Department of the Interior. U.S. Geological Survey. *The Significance of Field Growth and the Role of Enhanced Oil Recovery.* U.S.G.S. Fact Sheet FS-115-00, October 2000.

Williams, Peggy. "Enhanced Oil Recovery," *Oil and Gas Investor*, v. 16. July 1996, pp. 22-30.

TAX CREDIT FOR INVESTMENTS IN SOLAR, GEOTHERMAL, FUEL CELLS, AND MICROTURBINES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1]) Less than $50 million.

Authorization

Sections 46 and 48.

Description

Sections 46 and 48 provide a non-refundable income-tax credit for business investment in solar and geothermal energy equipment, fuel cells, and microturbines. The energy credit percentage is 30% for solar and fuel cell equipment, and 10% for geothermal and microturbine energy equipment, as well as for geothermal heat pumps, small commercial wind turbines, and combined heat and power systems. The 30% business energy credit for the purchase of qualified fuel cells applies to the costs of the power plants subject to a limit of $1,000 for each kilowatt of capacity ($3,000 for fuel cells). The power plant must have an electricity-only generation efficiency of greater than 30% and generation capacity of at least 0.5 kilowatt of electricity. For microturbines, the system must have an electricity-only generation efficiency of not less than 26% at International Standard Organization conditions and a capacity of less than 2,000 kilowatts. The

microturbine credit is 10% of the equipment costs (or basis) subject to a limit of $200 for each kilowatt of capacity.

Solar equipment is defined as a system that generates electricity directly (photovoltaic systems), or that heats, cools, or provides hot water in a building. It also includes equipment that illuminates the inside of a structure using fiber-optic distributed sunlight. Solar property used for heating a swimming pool is not eligible for the solar credit. Geothermal equipment includes systems used to produce, distribute, or use energy from a natural underground deposit of hot water, heat, or steam (such as geysers). In the case of geothermal equipment used to generate electricity, only equipment up to the transmission stage qualifies for the credit. A qualified fuel cell power plant is an integrated system comprised of a fuel cell stack assembly and associated balance of plant components that converts a fuel (usually natural gas) into electricity using electrochemical means, and which has an electricity-only generation efficiency of greater than 30%. The 10% credit for microturbines applies to the purchase of stationary microturbine power plants, including secondary components located between the existing infrastructure for fuel delivery and the existing infrastructure for power distribution.

The 30% credit for solar, and the credits for fuel cells and microturbines, are effective for property placed in service periods after December 31, 2005, and before January 1, 2017.

Investment in solar and wind energy equipment may also be recovered over 5 years, which provides for more accelerated depreciation deductions, and, therefore, lower effective tax rates, than under the more standard depreciation guidelines. However, the taxpayer's property costs for purposes of depreciation would be reduced by the amount of the investment tax credit claimed. As of January 1, 2005, electricity generated by solar and geothermal technologies has qualified for the section 45 production tax credit (as described in a separate entry in the Energy section of this compendium). However, if an investment tax credit is claimed under sections 46 and 48, then rules against double-dipping prevent a section 45 production tax credit from being claimed for power generated from the equipment that would receive the investment tax credit.

The business tax credits for solar, geothermal, fuel cell, and microturbine technologies are components of the general business credits and are thus subject to the restrictions, limitations, and carryover provisions of those credits.

Impact

The energy tax credits lower the cost of, and increase the rate of return to, investing in solar and geothermal equipment, whose return is generally much lower due to significantly higher capital costs, as compared to conventional energy equipment. Even with a 10% credit, and the recent technological innovations that have reduced costs, solar, geothermal, and other renewable energy technologies require relatively high and stable real oil prices in order to realize rates of return high enough to justify private investment. However, the quality of, and access to, a geothermal deposit can, in specialized cases, lower the production costs to below the costs of conventional energy. Sustained high real crude oil prices would render these technologies more competitive.

Even during the early 1980s, when oil prices were higher than today in real terms, and effective tax rates on these types of equipment were sometimes negative (due to the combined effect of the energy tax credits, the regular 10% investment tax credit, and accelerated depreciation), business investment in these technologies was negligible. It is not clear how much these credits encourage additional investment as opposed to subsidizing investment that would have been made anyway.

Renewable energy resources are, by definition, naturally replenished in a relatively short period of time. They include biomass, hydro power, geothermal energy, wind energy, and solar energy. In 2007, about 7% of all energy consumed, and about 9% of total electricity production, was from renewable energy sources. About half of renewable energy is consumed by the electric power sector to generate electricity, derived mostly from hydroelectric (77%), wood and other biomass (7.8%), geothermal (4.7%), wind (10%), and solar (0.2%). According to the Energy Information Administration (EIA), solar power accounts for 1% of total renewable energy consumption, used mostly in personal residences. Due primarily to high capital costs and low (or even negative) rates of return of solar systems, this still accounts for a negligible fraction of total residential energy use. Most solar thermal collectors are used for heating water and pools in residences. Geothermal energy consumption increased slightly from 2003 to 2007 (an average of 1.6% per year). Electricity generated from wind turbines has recently increased, mostly in response to a combination of federal and State incentives, but also due to the recent high energy prices. Wind power, which is virtually all electric, has been rising rapidly recently, increasing from negligible amounts in 1988 to about 14 kWhrs in 2004, and 32 kWhrs in 2007. However, EIA says wind still accounts for only 5% of renewable energy, and for only 10% of total U.S. electricity generation. Electricity from wind receives a production tax credit, but wind equipment does not qualify for an investment tax credit, although beginning on January 1, 2009 small commercial wind turbines will qualify for the 10% tax credit. There is little energy generated from fuel cells or microturbines, as these technologies are in their infancy. But these technologies — particularly microturbines — are

frequently mentioned among the newly emerging high-efficiency advanced energy technologies.

Production and use of solar thermal collectors and photovoltaic systems has increased significantly over the last 10 years, but particularly in 2005 and 2006. Domestic shipments of photovoltaic (PV) cells and modules nearly doubled in 2005 and reached a record high of 206 thousand peak kilowatts in 2006, a 54% increase from the 2005 level (134.5 thousand peak kilowatts). The impressive gains in production and use of photovoltaic systems, some of which are exported, has been driven primarily by declines in manufacturing costs, and the high price of conventional energy, but government policies (including tax credits) promoting renewable energy have undoubtedly also played a significant role. The demand for solar thermal collectors (measured in square feet) has also increased in recent years, but not as rapidly as the demand for solar electric systems. The number of manufacturers and their shipments of collectors reached a peak in the early 1980s coincident with the peak in oil prices. The 1986 drop in oil prices and the termination of the original residential solar credit in 1985 led to a decline in solar collector shipments for the next 10 years. Total shipments began to increase again in 1997 and in 2005 were more than double the amount in 1996. The residential sector continued to be the prime market for solar thermal collectors, totaling 14.7 million square feet in 2005, or 92% of total shipments. The largest end use for solar collectors shipped in 2004 was for heating swimming pools, consuming 15 million square feet in 2005 (94% of total shipments). As a result, the vast majority of solar thermal collector shipments were not eligible for the tax credits. The most recent data available shows that geothermal heat pump manufacturers shipped 63.7 thousand geothermal heat pumps in 2006, a 33% increase from 2005 to 2006. The total rated capacity of heat pumps shipped in 2006 was 245,603 tons of capacity (one ton of capacity = 12,000 Btu's per-hour), compared to 124,438 tons in 2003.

Rationale

The business energy tax credits were established as part of the Energy Tax Act of 1978 (P.L. 95-618), which was one of five public laws enacted as part of President Carter's National Energy Plan. The rationale behind the credits was primarily to reduce U.S. consumption of oil and natural gas by encouraging the commercialization of renewable energy technologies, to reduce dependence on imported oil and enhance national security.

Under the original 1978 law, which also provided for tax credits for solar and geothermal equipment used in residences, several other types of equipment qualified for tax credits: shale oil equipment, recycling equipment, wind energy equipment, synthetic fuels equipment, and others. For some types of equipment, the credits expired on December 31, 1982;

others were extended by the Crude Oil Windfall Profit Tax Act of 1980 (P.L. 96-223) through 1985.

The 1980 Windfall Profit Tax Act extended the credit for solar and geothermal equipment, raised their credit rates from 10% to 15%, repealed the refundability of the credit for solar and wind energy equipment, and extended the credit beyond 1985 for certain long-term projects. The Tax Reform Act of 1986 (P.L. 99-514) retroactively extended the credits for solar, geothermal, ocean thermal, and biomass equipment through 1988, at lower rates.

The Miscellaneous Revenue Act of 1988 (P.L. 100-647) extended the solar, geothermal, and biomass credits at their 1988 rates — ocean thermal was not extended. The Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239) extended the credits for solar and geothermal and reinstated the credit for ocean thermal equipment, through December 31, 1991. The credit for biomass equipment was not extended. The Tax Extension Act of 1991 (P.L. 102-227) extended the credits for solar and geothermal through June 30, 1992. The Energy Policy Act of 1992 (P.L. 102-486) made the credits for solar and geothermal equipment permanent. The American Jobs Creation Act of 2004 (P.L. 108-357) allowed solar, geothermal, and other types of renewable energy technologies to qualify for the section 45 electricity production tax credit.

Thus, the credits for solar and geothermal equipment are what remained of the business energy tax credits enacted under the Energy Tax Act of 1978. Prior to the Energy Policy Act of 2005, and with the reforestation credit and the rehabilitation credit, they were the sole exceptions to the repeal of the investment tax credits under the Tax Reform Act of 1986. The Energy Policy Act of 2005 raised the credit rate for solar equipment from 10% to 30%, and expanded it to fiber optic distributed sunlighting, fuel cells, and microturbines. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) extended the 30% tax credit for solar and the 10% credit for microturbines by one year through 2008. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extends the 30% investment tax credit for solar energy property and qualified fuel cell property, as well as the 10% investment tax credit for micro turbines, for eight years (through 12-31-2016). Under the Energy Policy Act of 2005 (P.L. 109-58), the 30% rate for solar was temporary and would have reverted back to the permanent rate of 10% on January 1, 2009. P.L. 110-343 adds small commercial wind, geothermal heat pumps, and combined heat and power systems (at a 10% credit rate) as a category of qualified investment. That legislation also increases the $500 per half kilowatt of capacity cap for qualified fuel cells to $1,500 per half kilowatt and allows these credits to be used to offset the alternative minimum tax (AMT).

Assessment

The business energy tax credits encourage investments in technologies that rely on clean, abundant, and, in the case of solar energy, unlimited renewable energy as substitutes for conventional fossil-fuel technologies that pollute the environment and contribute to dependence on imported petroleum. A major policy question is the cost — in terms of foregone federal tax revenue and distortions to the allocation of resources — in relation to the relatively small fossil fuels savings and environmental gains.

In the aggregate, the credits don't lose much federal tax revenue, but in relation to the small amounts of fossil energy they save, the revenue loss per barrel of displaced energy response to the credits is low. They also subsidize two specific technologies where others arguably might provide greater benefit if they were subsidized instead. The environmental and security problems associated with production and consumption of fossil fuels could also be addressed with emissions taxes or emissions trading rights — such as those in the Clean Air Act — in lieu of tax subsidies which are not only costly, but distortionary.

The high capital costs for renewable and alternative energy technologies, and market uncertainty, are not evidence of energy market failure, although they do act as barriers to the development and commercialization of these technologies. However, the incentive effects of the investment tax credits might lead to technological innovations that may reduce the costs of the subsidized technologies and (eventually) make them more competitive (or at least, less uneconomical).

Selected Bibliography

Congressional Budget Office. *Prospects for Distributed Electricity Generation.* A CBO Paper. Washington, DC: September 2003.

Fisher, Anthony C., and Michael H. Rothkopf. "Market Failure and Energy Policy: A Rationale for Selective Conservation," *Energy Policy*, v. 17. August 1989, pp. 397-406.

Hasset, Kevin A., and Gilbert E. Metcalf. "The Whys and Hows of Energy Taxes." *Issues in Science and Technology*. Winter 2008, v. 24, pp. 45-51

Hoerner, J. Andrew and Avery P. Gilbert. *Assessing Tax Incentives for Clean Energy Technologies: A Survey of Experts Approach*. Center for a Sustainable Economy. Washington, DC: April 2000.

Inyan,S., L. Sunganthi, and Anand A. Samuel. "Energy Models for Commercial Energy Production and Substitution of Renewable Energy Resources." *Energy Policy*, v.34. November 2006, pp. 26-40.

Kobos, Peter H., Jon D. Erickson, and Thomas E. Drennen. "Technological Learning and Renewable Energy Costs: Implications for US

Renewable Energy Policy." *Energy Policy*, v. 34, September 2006, pp.16-45.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: September 25, 2008.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

Sav, G. Thomas. "Tax Incentives for Innovative Energy Sources: Extensions of E-K Complementarity," *Public Finance Quarterly*, v. 15. October 1987, pp. 417-427.

Rich, Daniel, and J. David Roessner. "Tax Credits and U.S. Solar Commercialization Policy," *Energy Policy*, v. 18. March 1990, pp. 186-198.

— . House Committee on Ways and Means. *Tax Credits for Electricity Production from Renewable Energy Resources.* Hearing Before the Subcommittee on Select Revenue Measures, 109th Congress, 1st session, May 24, 2005.

— . Senate Committee on Energy and Natural Resources. *Power Generation Resource Incentives and Diversity*. Hearings, 109th Congress, 1st session. Washington, DC: U.S. Government Printing Office, March 8, 2005.

Sissine, Fred. *Renewable Energy: Background and Issues for the 110th Congress.* Congressional Research Service Report RL34162. Washington, DC: March 25, 2008

U.S. Department of Energy. Energy Information Administration. *Survey of Geothermal Heat Pump Shipments: 2006*. April 2008.

U.S. Department of Energy. Energy Information Administration. *Renewable Energy Annual: 2006*. April 2008.

U.S. Department of Energy. Energy Information Administration. *Solar Thermal and Photovoltaic Collector Manufacturing Activities: 2006*. October 2007.

U.S. Department of Energy. Energy Information Administration. *Legislation Affecting the Renewable Energy Marketplace*: 2006.

TAX CREDITS FOR CLEAN FUEL VEHICLE REFUELING PROPERTY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

[[1]]Less than $50 million.

Authorization

Section 30C.

Description

A 30% tax credit is provided for the cost of any qualified alternative fuel vehicle refueling property installed in a business or at the taxpayer's principal residence. The credit is limited to $30,000 for businesses at each separate location, and $1,000 for residences. Clean fuel refueling property is basically any tangible equipment (such as a pump) used to dispense a fuel into a vehicle's tank. Qualifying property includes fuel storage and dispensing units and electric vehicle recharging equipment. A clean fuel is defined as any fuel at least 85 percent of the volume of which consists of ethanol (E85) or methanol (M85), natural gas, compressed natural gas (CNG), liquefied natural gas, liquefied petroleum gas, and hydrogen, or any mixture of biodiesel and diesel fuel, determined without regard to any use of kerosene and containing at least 20% biodiesel. The taxpayer's basis in the property is reduced by the amount of the credit. No credit is available for property used outside the United States.

Only the portion of the credit attributable to property subject to an allowance for depreciation would be treated as a portion of the general business credit; the remainder of the credit would be allowable to the extent of the excess of the regular tax (reduced by certain other credits) over the alternative minimum tax for the year. This credit is effective for property placed in service after December 31, 2005, and in the case of property relating to hydrogen, before January 1, 2015; and in the case of any other property, before January 1, 2011.

Impact

Under current depreciation rules (the Modified Cost Recovery System) the cost of most equipment used in retail gasoline and other fuel dispensing stations is generally recovered over five years using the double-declining balance method. However, some of the property might be classified differently and have a longer recovery period. For example, concrete footings and other "land improvements" have a recovery period of nine years. Alternatively, under IRC section 179, a small business fuel retailer may elect to expense up to $100,000 of such investments. Allowing a 30% investment tax credit for alternative fuel dispensing equipment greatly reduces the after-tax cost, raises the pre-tax return, and reduces the marginal effective tax rates significantly. This should increase investment in alternative fuel dispensing equipment and increase the supply of alternative fuels.

To the extent that the credits are effective in increasing the supply of alternative fuels, and substitute for petroleum products (gasoline and diesel fuel), there is a decline in petroleum use and importation. Fuel consumed in conventional motor vehicles accounts for the largest fraction of total petroleum consumption and is a leading source of dependence on foreign oil. Alternative fuel vehicles are also generally less polluting, producing significantly lower total fuel cycle emissions when compared to equivalently sized conventional vehicles.

Rationale

Section 30C was enacted as part of the Energy Policy Act of 2005 (P.L. 109-58) to stimulate the supply of alternative motor fuels such as E85 (mixtures of 15% gasoline and 85% ethanol) and CNG. The provision complements the two other major tax incentives for alternative fuels: the tax credits for advanced technology vehicles, including alternative fueled vehicles, under IRC section 30B, and the tax credits for the sale or use of the alternative fuel under IRC section 6426 and 6427. Congress held that further investments in alternative fuel infrastructure to be necessary to encourage consumers to invest in alternative fuel vehicles. This investment, in turn, is

necessary to transform the mode of transportation in the United States toward more clean fuel efficient vehicles, relying less on petroleum, particularly imported petroleum, which endangers U.S. energy and economic security. The Energy Policy Act of 1992 (P.L. 102-486) introduced a $100,000 tax deduction for business investment in clean fuel refueling property. This tax deduction was set to expire on January 1, 2007, but the Energy Policy Act of 2005 accelerated the expiration date by one year and replaced the deduction with the 30% tax credit. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the 30% alternative refueling property credit (capped at $30,000) for three years, through 2010. The law also provides a tax credit to businesses (e.g., gas stations) that install alternative fuel pumps, such as fuel pumps that dispense fuels such as E85, compressed natural gas and hydrogen. The law also adds electric vehicle recharging property to the definition of alternative refueling property.

Assessment

Substantial economic research over the years suggests that lack of investment in alternative fuel supply is due, at least in part, to lack of consumer demand for the vehicles, which was in turn due to the lack of alternative fuel infrastructure. The section 30C tax credit for clean fuel refueling property was intended to address this market obstacle to alternative fuel production and use. In the short run, domestic automobile companies have favored production of flexible-fuel vehicles (particularly vehicles that can use E85). To the extent that the ATV credits under IRC section 30B accrue to flexible fuel vehicles, there is some concern that consumers will continue to use gasoline in those vehicles rather than E85. Available data suggest that very few such vehicles actually use E85, which is not only more expensive than gasoline, but is scarce due to the lack of supply infrastructure. This finding means that, in effect, the ATV tax credits may actually encourage the demand for vehicles that end up running on conventional fuels.

Recent (2008) data show, for instance, that of the 120,000 fuel retailers in the United States, only about 1,400 dispense E85. The 30% tax credit for alternative fuel property at refueling stations could address this shortage and market problem to the development of alternative fuels. Given the current rudimentary state of development of E85 and other alternative fuel refueling infrastructure required for their use, and given the many technological and cost barriers to this development, the tax credit might stimulate additional investment. Greater (and more convenient) supply of alternative fuels could then reduce their price, stimulate demand for alternative fuels, and reduce petroleum consumption and importation.

From an economic perspective, however, allowing special tax credits for selected technologies (and not others) distorts the allocation of resources — it creates distortions and economic inefficiencies. It encourages investments

in high cost technologies, ones that would not otherwise be economical at current and expected prices and rates of return. Economic theory suggests that taxes on conventional fuels and conventional fuels using vehicles, such as the gas-guzzler tax of IRC section 4064, is more effective and efficient in stimulating the development of the least cost alternatives to gasoline and diesel fuel. When conventional motor fuel prices are sufficiently high, many motorists have sufficient financial incentives to purchase more fuel efficient vehicles, and vehicles fueled by alternative fuels, without tax credits.

Selected Bibliography

European Commission. *Urban Transport: Options for Propulsion Systems and Instruments for Analysis.* March 22, 2001. (Contract No. UR-97-SC-2076), p. 64, 65.

Boes, Richard F., and G. Michael Ransom. "Clean-Fuel Vehicles and Refueling Property in the United States Tax Code." *Logistics and Transportation Review.* March 1994.v.30. pp. 73-79.

Chirinko, Robert S., Steven M. Fazzarri, and Andrew P. Meyer. "How Responsive is Business Capital Formation to its User Cost? An Exploration with Micro Data." *Journal of Public Economics* vol. 74 (1999), pp. 53-80.

Cohen, Darryl, and Jason Cummins. *A Retrospective Evaluation of the Effects of Temporary Partial Expensing.* Federal Reserve Board Staff Working Paper 2006-19, April 2006.

Cordes, Joseph J. "Expensing," in the *Encyclopedia of Taxation and Tax Policy*, Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, eds (Washington: Urban Institute Press, 2005).

Cummins, Jason G., Kevin A. Hassett, and R. Glenn Hubbard, "A Reconsideration of Investment Behavior Using Tax Reforms as Natural Experiments." *Brookings Papers on Economic Activity*, 1994, no. 1, pp. 1-72.

Guenther, Gary. *Small Business Expensing Allowance: Current Status, Legislative Proposals, and Economic Effects.* CRS Report RL31852, October 3, 2006.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: September 22, 2008.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

_. *Expired and Expiring Energy Tax Incentives*. Library of Congress, Congressional Research Service Report 94-525. Washington, DC: June 22, 1994.

U.S. Department of Energy. *TAFV Alternative Fuels and Vehicle Choice Model Documentation.* Prepared for Oak Ridge National Laboratory (ORNL/TM-2001/134), by David L. Greene. July, 2001.

"Tax Briefing: A Look at the Energy Tax Incentives Act of 2005 and the SAFE Transportation Equity Act of 2005." *Taxes.* September 2005. v. 83. pp. 19-27.

Yacobucci, Brent. *Alternative Transportation Fuels and Vehicles: Energy, Environment, and Developmental Issues*. U.S. Library of Congress. Congressional Research Service. CRS Report RL 30758, January 7, 2005.

_. *Advanced Vehicle Technologies: Energy, Environment, and Developmental Issues*. U.S. Library of Congress: Congressional Research Service. CRS Report RL30484, December 6, 2007.

_. *Tax Incentives for Alternative and Advanced Technology Vehicles*. U.S. Library of Congress: Congressional Research Service. CRS Report RL 22351, December 19, 2005.

TAX CREDITS FOR ELECTRICITY PRODUCTION FROM RENEWABLE RESOURCES AND COAL PRODUCTION

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.9	0.9
2009	([1])	1.2	1.2
2010	([1])	1.2	1.2
2011	([1])	1.1	1.1
2012	([1])	1.1	1.1

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 45.

Description

Taxpayers are allowed a 2.1¢ credit for 2008 per kilowatt-hour of electricity produced from qualified wind energy, "closed-loop" biomass, geothermal, and solar (only for pre-2006 facilities). Taxpayers are also allowed a 1.05¢/kWh. credit for electricity produced from open-loop biomass (including poultry and other livestock waste), small irrigation power, and municipal solid waste. Beginning on October 3, 2008 electricity produced from marine and hydrokinetic renewable energy also qualifies for this tax credit at the rate of 1.05¢/kWh. In addition, section 45 provides a tax credit of $6.061/ton in 2008 ($4.375/ton, in 1992 dollars), for production of refined coal — not for the electricity produced from the coal. Beginning on October 3, 2008, steel industry fuel also qualifies as refined coal. There is also a tax credit available for sales of Indian coal to an unrelated party from a qualified facility beginning January 1, 2006, and ending December 31, 2012. This credit is $1.50 per ton during 2006-2009 and increases to $2.00

per ton in 2110- 2012. The credit amount for Indian coal is to be adjusted for inflation in calendar years after 2006. The credit is $1.589 per ton of Indian coal sold in 2008.

Municipal solid waste covers two types of power facilities: trash combustion facilities that burn trash directly to generate power, and landfill gas facilities that first produce methane, which is then burned to generate electricity. The 2.1¢ and 1.05¢ tax credits are values for 2008, which equal the 1992 base credits of 1.5¢ and 0.75¢ adjusted for inflation. In the case of both types of municipal waste facilities, small irrigation power, and open-loop biomass facilities, the credit was established at half, in base 1992 dollars, the credit for the other types of renewables. The electricity must be produced from a facility owned by a taxpayer and it must be sold to an unrelated third party.

Closed-loop biomass involves the use of plant matter, where plants are grown solely as fuel to produce electricity, and can be combined with either coal or open-loop biomass in a co-fired system. Open-loop biomass refers to a variety of waste materials and by-product sources, such as scrap wood or agricultural livestock waste and crop wastes, or timber wastes such as mill and harvesting residues, pre-commercial thinnings, slash, and brush. Poultry waste is defined as poultry manure and litter, but it also includes wood shavings, straw, rice hulls, and other bedding materials for the disposition of manure. Small irrigation power is a hydro-power system without a dam or water impoundment ranging in size between 150 kilowatts and 5 megawatts of power. It uses ditches and canals to generate power. The definition of municipal solid waste is taken from the Solid Waste Disposal Act. This basically includes most types of organic waste or garbage in landfills and municipal biosolids, sludge, and other residues removed by a municipal wastewater treatment facility. Refined coal is defined as a liquid, gaseous, or solid synthetic fuel produced from coal (and lignite) or high carbon fly ash, including such fuel used as a feedstock. Qualifying coal must emit 20% less sulfur dioxide, and either 20% less mercury or nitrous oxide, than comparable coal sources.

Generally, the credits are available for ten years beginning on the date the facility is first placed into service, which varies by type of qualifying property. The property must be placed in service by December 31, 2009 in the case of wind and refined coal, and through December 31, 2010 in the case of other sources.

Both the 1.5¢ electricity credit and the $4.375 coal credit are phased out as reference energy prices exceed certain thresholds. The 1.5¢ electricity credit (adjusted for post-1992 inflation) is phased out as the reference price of electricity — the average annual contract price of electricity from the renewable source — rises over a 3¢ range, beginning with an inflation-adjusted threshold of 8¢ per kilowatt hour (kWh). For example, if the reference price of electricity were 9.5¢, the 1.5¢ tax credit would be reduced

by ½ [(.095-.08)/3 = .5] to .75¢/ kWh. Each of these amounts, except the 3¢, have been adjusted for inflation since 1992. The 2008 inflation adjustment factors are 1.3854 for qualified energy resources and refined coal, and 1.0591 for Indian coal. The 2008 reference price is 3.60¢/kWh for facilities producing electricity from wind. The reference price for fuel used as feedstock is $45.56 per ton for calendar year 2008. 2008 reference prices for facilities producing electricity from closed-loop biomass, open-loop biomass, geothermal energy, solar energy, small irrigation power, municipal solid waste and qualified hydropower production have not been determined. The renewable electricity production credit is not subject to a phaseout in 2008. Because the reference price of refined coal was less than the inflation-adjusted base price, the full credit was available in 2008.

Cooperatives that are eligible for the §45 credit may elect to pass through any portion of the credit to their patrons. To be eligible for this election, the cooperative would have to be more than 50%-owned by agricultural producers or entities owned by agricultural producers. The election would be made on an annual basis, and it would be irrevocable once made.

A facility that qualifies for the § 45 credit may also claim other government benefits, including the business energy credit or investment credit and the tax benefits under the tax-exempt clean renewable energy bond provisions. However, in all cases except for co-fired facilities, the section 45 credits are reduced by half — no such reduction is required of co-fired facilities, which means that qualifying systems may "double dip." In all cases, the credit is available to the owner of the facilities that produce the electricity or refined coal. In two exceptions — in the case of open-loop biomass, and co-firing facilities — the lessee operator may also claim the tax credit in lieu of the facility's owner.

The §45 tax credits are components of the general business credit, and are subject to the rules governing the restrictions and carry-overs of that section of the tax code.

Impact

Both the renewable electricity credit and the new refined coal credit are production incentives — the former reduce the marginal and average costs of generating electricity from renewable energy resources, and latter costs for producing refined coal. The renewable electricity credit was originally intended to encourage the generation of electricity from wind and biomass by making such electricity more competitive with electricity generated from coal fired power plants and other sources. Until recently, very little electricity was actually generated from wind and closed-loop (energy coop) biomass, although substantial electricity is generated from wood, wastes, and other open-loop biomass — but this is still a relatively small fraction of total electricity generation.

Renewable energy resources are, by definition, naturally replenished in a relatively short period of time. They include biomass, hydro power, geothermal energy, wind energy, and solar energy. In 2007, about 7% of all energy consumed, and about 9% of total electricity production was from renewable energy sources. About half of renewable energy is consumed by the electric power sector to generate electricity, derived mostly from hydroelectric (77%), wood and other biomass (7.8%), geothermal (4.7%), wind (10%), and solar (0.2%). According to the Energy Information Administration (EIA), solar power accounts for 1% of total renewable energy consumption, used mostly in personal residences. Geothermal energy consumption increased slightly from 2003 to 2007 (an average of 1.6% per year). Electricity generated from wind turbines has recently increased, mostly in response to a combination of federal and State incentives, but also due to the recent high energy prices. Wind power, which is virtually all electric, has been rising rapidly recently, increasing from negligible amounts in 1988 to about 14 kWhrs in 2004, and 32 kWhrs in 2007. However, EIA says wind still accounts for only 5% of renewable energy, and for only 10% of total U.S. electricity generation. Electricity from wind receives a production tax credit, but wind equipment does not qualify for an investment tax credit, although beginning on January 1, 2009 small commercial wind turbines will qualify for the 10% tax credit. The extension and broadening of the renewable electricity production tax credit will likely support further growth in generation from wind turbines and may also stimulate biomass co-firing with coal.

In general, energy from biomass has been declining in recent years although some types of biomass — landfill gas, and energy from waste — are used in greater quantities to generate power. Still most biomass electricity is generated from open-loop sources such as forest/lumber waste, accounting for 70% of the total electricity generated from biomass. There is little, if any, electricity generated from closed-loop biomass as it is uneconomic to grow plants exclusively under a "closed-loop" system, but the expansion of the §45 tax credit to "open-loop" biomass, i.e., to various types of agricultural waste and other biomass products, will likely further increase electricity from this renewable resource. By allowing existing power plants to claim the electricity credit for burning open-loop biomass, significant co-firing of existing coal facilities is possible. Some coal facilities are able to rapidly convert to co-firing with biomass, while others would take a couple of years to make the required capital investment for conversion at a cost of about $200/kilowatt hour, which is lower than most alternatives.

The credit phase-outs are designed to remove the subsidy when the price of electricity (and refined coal) becomes sufficiently high that a subsidy is no longer needed. The tonnage credit for refined coal is also a production tax credit, which reduces the marginal and average costs of producing refined coal as compared with conventional coal for electricity generation.

Rationale

This provision was adopted as part of the Energy Policy Act of 1992 (P.L. 102-486). Its purpose was to encourage the development and utilization of electric generating technologies that use specified renewable energy resources, as opposed to conventional fossil fuels. The Ticket to Work and Work Incentive Improvement Act of 1999 (P.L. 106-170) extended the placed-in-service deadline from July 1, 1999, to January 1, 2002. It also added poultry waste as a qualifying energy resource. The Job Creation and Worker Assistance Act of 2002 (P.L. 107-147) extended the placed-in-service deadline to January 1, 2004. The Working Families Tax Relief Act of 2004 (P.L. 108-311) extended the placed-in-service dates for wind, closed-loop biomass, and poultry waste facilities so that those placed into service after December 31, 2003, would also qualify for the tax credit. The American Jobs Creation Act of 2004 (P.L. 108-357) expanded the renewable electricity credit to open-loop biomass, geothermal, solar, small irrigation power, and municipal solid waste facilities, and created the production tax credit for refined coal. (The refined coal tax credit was originally part of the proposed expansion of the nonconventional fuels production tax credit under initial comprehensive energy legislation. That provision was dropped from comprehensive energy legislation and established as part of the American Jobs Creation Act of 2004.)

The Energy Policy Act of 2005 (P.L. 109-58) extended the placed-in-service deadline for all facilities except for solar energy facilities described in §45(d)(4) and refined coal production facilities described in §45(d)(8) by two years to December 31, 2007. In addition, P.L. 109-58 extended the credit period to 10 years for all qualifying facilities placed in service after the date of enactment (August 8, 2005), eliminating the five-year credit period to which some facilities had been subject. Also, the definition of qualified energy resources that can receive the credit was expanded to include qualified hydropower production, although a qualified hydroelectric facility would be entitled to only 50% of the usual credit. P.L. 109-58 also added Indian coal production facilities to the list of those facilities eligible for the credit. The credit is available for sales of Indian coal to an unrelated party from a qualified facility beginning January 1, 2006, and ending December 31, 2012. The credit is $1.50 per ton during 2006-2009 and increases to $2.00 per ton in 2110- 2012; the credit amount for Indian coal is to be adjusted for inflation in calendar years after 2006. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) extended the placed-in-service date for facilities other than solar, qualified coal and Indian coal to the end of 2008. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the placed-in-service date for the §45 credit through December 31, 2009 in the case of wind and refined coal, and through December 31, 2010 in the case of other sources. The 2008 law also expands the types of facilities qualifying for the credit to new biomass facilities and to those that generate electricity from marine renewables (e.g., waves and tides). The law also updates the definition of an open-loop biomass facility, the definition of a

trash combustion facility, and the definition of a non-hydroelectric dam. Finally, the law also increases emissions standards on the refined coal credit, and removes its market value test, which effectively adds steel industry fuel to the list of qualifying fuels.

Assessment

Federal tax policy, and other federal energy policy, has been critical to the development of renewable electricity, particularly wind power. In the late 1970's and 1980's the investment tax credits established under President Carter's National Energy Act (NEA), along with California State tax credits, helped establish the first installations of wind power generation capacity. There was a slowdown in wind power investments in response to the sunset of these investment incentives, and the decline in real oil prices, but a lagged response after the enactment of the §45 production tax credit in 1992. The evidence also suggests that termination of the §45 tax credit to wind power due to the expiration of the placed-in-service date on January 1, 2004, created policy uncertainty, and probably adversely affected (if only temporarily) investment in the technology.

In addition to the §45 production tax credit, two other federal policies have contributed to the development of electricity from wind: PURPA, the Public Utility Regulatory Policies Act of 1978 (P.L. 95-617, Section 210) as amended by the Energy Policy Act of 2005, and REPI, the renewable energy production incentive. PURPA, which was also enacted as part of President Carter's NEA, required electric utilities to buy electricity from "qualifying facilities" at the utilities' avoided cost, the cost to the utility to generate or otherwise purchase electricity from another source. PURPA has been one of the most significant laws for the development of wind power, landfill gas, and other renewable energy resources. The Energy Policy Act of 2005 repealed the mandatory purchase requirement for new contracts if the Federal Energy Regulatory Commission finds that a competitive electricity market exists and a qualifying facility has access to independently administered, auction-based, day-ahead, real-time wholesale markets and long-term wholesale markets. This amendment may adversely affect renewable energy markets. The REPI, introduced in 1992 as part of the Energy Policy Act of 1992, is a financial incentive provided to tax exempt entities — tax exempt utilities (cooperatives), and State and local governments — for electricity generated from certain types of renewable energy resources. The incentive, which is 1.9¢/kWh of electricity generated, is the grant or spending subsidy equivalent of the §45 tax credit available for private taxable businesses.

The electricity production tax credit might be justified on the basis of reducing pollution — generating power from non-polluting energy resources, such as wind, which emit no pollutants. Generally, however, special tax (as well as other types of government) subsidies in one market to address

external costs (pollution) created by other markets (the market for conventional fossil fuels) are seen as being inefficient and costly. Also, providing tax credits and deductions for certain types of investment or consumption, even if for environmentally clean energy technologies, depending on other market distortions and failures, may result in a misallocation of resources. An alternative way to reduce pollution is by directly taxing either the emissions, or the conventional energy resources that produce the emissions. Economic theory holds that this would allow the markets to choose the optimal response.

The provision cannot be justified on the grounds of reducing dependence on imported oil since virtually none of the renewable electricity substitutes for petroleum — most of it would substitute for either coal or cleaner, but still polluting, natural gas. Also, there are more effective and efficient alternatives to address petroleum import dependence, such as stockpiling.

Selected Bibliography

Carlson, Curtis and Gilbert E. Metcalf. "Energy Tax Incentives and the Alternative Minimum Tax." *National Tax Journal.* September 2008, v. 61, pp. 477-492.

Dallas Morning News. "U.S. Wind Energy Business Hindered by Federal Energy Bill Delay." March 2, 2004.

DeCarolis, Joseph F. and David W. Keith. "The Economics of Large-Scale Wind Power in a Carbon-Constrained World." *Energy Policy*, v. 34, March 2006, pp. 395-410.

Fisher, Anthony C., and Michael H. Rothkopf. "Market Failure and Energy Policy: A Rationale for Selective Conservation," *Energy Policy*, v. 17. August 1989, pp. 397-406.

Hill, Lawrence J. and Stanton W. Hadley. "Federal Tax Effects on the Financial Attractiveness of Renewable vs. Conventional Power Plants," *Energy Policy*, v. 23. July 1995, pp. 593-597.

Hoerner, J. Andrew and Avery P. Gilbert. *Assessing Tax Incentives for Clean Energy Technologies: A Survey of Experts Approach*. Center for a Sustainable Economy. Washington, DC: April 2000.

Inyan,S., L. Sunganthi, and Anand A. Samuel. "Energy Models for Commercial Energy Production and Substitution of Renewable Energy Resources." *Energy Policy*, v.34. November 2006, pp. 26-40.

Klass, Donald L. "Biomass Energy in North American Policies," *Energy Policy*, v. 23. December 1995, pp. 1035-1048.

Kobos, Peter H., Jon D. Erickson, and Thomas E. Drennen. "Technological Learning and Renewable Energy Costs: Implications for US Renewable Energy Policy." *Energy Policy*, v. 34, September 2006, pp.16-45.

Lane, Nic. *Wave, Tidal, and In-Stream Energy Projects; Which Federal Agency Has the Lead?* Library of Congress, Congressional Research Service Report RS22721. Washington, DC: October 7, 2008.

_. *Issues Affecting Tidal, Wave, and In-Stream Generation Projects.* Library of Congress, Congressional Research Service Report RL33883. Washington, DC: October 7, 2008.

Lazzari, Salvatore. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

—. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: September 22, 2008.

— . *Energy Tax Subsidies: Biomass vs. Oil and Gas*, Library of Congress, Congressional Research Service Report 93-19 E, Washington, DC: January 5, 1993.

—. "Federal Tax Policy Toward Biomass Energy: History, Current Law, and Outlook," *Biologue*. July/August 1989, pp. 8-11.

Grobman, Jeffrey H. and Janis M. Carey. "The Effect of Policy Uncertainty on Wind-Power Investment." *The Journal of Energy And Development*, v. 28, Autumn 2002. pp. 1-14.

Owen, Anthony D. "Environmental Externalities: Market Distortions and the Economics of Renewable Energy Technologies." *The Energy Journal*, v. 25. Fall, 2004, pp. 127-156.

Petersilk, Thomas W. *Modeling the Costs of U.S. Wind Supply.* U.S. Department of Energy. Energy Information Administration. EIA/DOE-0607(99).

Price, Jeff. *The Production Tax Credit: Getting More Credit Than It's Due?* Public Utilities Fortnightly, May 15, 2002. p. 38-41.

Sissine, Fred. *Renewable Energy Policy: Tax Credit, Budget, and Regulatory Issues.* Congressional Research Service Report RL33588. Washington, DC: July 28, 2006.

Schnepf, Randy. *Agriculture-Based Renewable Energy Production.* Congressional Research Service Report RL32712. Washington, DC: August 4, 2006.

Spath, Pamela L., Margaret K. Mann, and Stefanie A. Woodward. "Life Cycle Assessment of a Biomass-to-Electricity System," Biologue, v. 16, 1st Q, 1998, pp. 16-21.

U.S. Department of Energy. Lawrence Berkeley National Laboratory. *Analyzing the Interaction Between State Tax Incentives and the Federal Production Tax Credit for Wind Power*. [by Wiser, Ryan, et al.] September 2002. 11 p.

U.S. Department of Energy. Energy Information Administration. *Renewable Energy Annual: 2006*. April 2008.

U.S. Department of Energy. Energy Efficiency and Renewable Energy. *Annual Report on U.S. Wind Power Installation, Cost, and Performance Trends: 2007*. May 2008.

U.S. Department of Energy. Energy Information Administration. *Legislation Affecting the Renewable Energy Marketplace*: 2006.

Wiser, Ryan. "Wind Power and the Production Tax Credit: An Overview of Research Results." Testimony Prepared for a Hearing On Clean Energy by the U.S. Senate Finance Committee, March 29, 2007.

TAX CREDITS FOR INVESTMENTS IN CLEAN COAL POWER GENERATION FACILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.2	0.2
2009	-	0.2	0.2
2010	-	0.2	0.2
2011	-	0.1	0.1
2012	-	0.1	0.1

Authorization

Sections 48A and 48B.

Description

An investment tax credit is provided for selected types of advanced coal technologies. Both the rate of credit and the total amount of credits allowed in the aggregate, for each type of technology, is limited. The rates of credit and the total limitations are as follows: (1) a 20 percent tax credit for integrated gasification combined cycle (IGCC) technologies (the limit on these credits is $800 million), (2) a 15 percent investment tax credit and other types of advanced clean-coal generating systems (the limit on these credits is $500 million), (3) a 30 percent tax credit for advanced coal-based generation technologies meeting certain separation and sequestration requirements seeking allocations after October 3, 2008 (the total credits cannot exceed $1.25 billion), (4) a 20 percent tax credit qualifying advanced gasification systems, (the total credit limit is $350 million), and (5) a 30 percent tax credit for advanced gasification projects seeking allocation after October 3, 2008 that include equipment which separates and sequesters at least 75 percent of the project's total carbon dioxide emissions (the total

credit limit is $250 million). Each of the credits would be allocated by the Secretary based on the amount invested.

The credits were originally effective for investments made after August 8, 2005; and after October 3, 2008 for the higher tax credits and increased allocations. In all cases, the credits are available only for projects certified by the Secretary of Treasury, in consultation with the Secretary of Energy. The Secretary of Treasury must establish a certification program, and certifications are issued using a competitive bidding process.

Impact

Clean coal technologies are technologically feasible strategies for generating electric power from coal efficiently and cleanly. Qualified gasification projects convert coal, petroleum residue, biomass, or other materials recovered for their energy or feedstock value into a synthesis gas composed primarily of carbon monoxide and hydrogen for direct use or subsequent chemical or physical conversion. Clean-coal technologies include the pressurized fluidized-bed combustion-combined cycle, IGCC, the indirect-fired cycle repowering, the coal diesel-combined cycle, and slagging technology. Such technologies are significantly more energy efficient than the conventional coal-fired power plants currently in use, which have an operating efficiency of about 34 percent (meaning that 66 percent of the energy used is lost in the generation process). Currently, some of the clean-coal technologies can achieve 45 percent efficiency. Some clean-coal technologies also reduce emissions of one or more of 4 air pollutants (NO_x SO_2,PM, H_g) with CO_2, to a greater degree than conventional coal plants. This technology development is occurring as the Environmental Protection Agency (EPA) has regulations to further reduce emissions of NO_x and SO_2, and to begin reducing H_g emissions. Sub-bituminous coal can be used if 99% of the SO_2 emissions are removed or an emission limit of 0.04 pounds of SO_2 per million Btu's over 30 days.

Clean coal systems are, however, very capital intensive and require relatively large investments in construction and development costs — basically fixed capital costs. Per kilowatt of capacity, such technologies currently cost between $2,000 and $3,000. Because of high capital costs, rates of return are very low or even negative, even with existing accelerated depreciation provisions. Thus, although clean coal technologies have been successfully demonstrated, none are commercially viable at the present time, and none would be commercially viable without additional tax incentives. The investment tax credits may reduce the after-tax cost of the qualifying technologies and increase the rates of return sufficiently to overcome the high fixed capital cost and higher operating costs. This lowers effective tax rates on the return to such investments. Combined with existing accelerated depreciation benefits, the investment tax credit would improve the financial attractiveness of clean coal technologies relative to these alternatives. In

addition, with global warming becoming an important concern, clean coal technologies, combined with carbon capture and storage (CCS) technology may be an important option in reducing greenhouse gases. In particular, IGCC, the one technology targeted by the investment tax credits, may become (combined with CCS) a cost-effective option for limiting CO_2 in the future.

Also, the additional commercialization that may result from the generous investment tax credits may engender further technological improvements that could lower the cost of clean coal technologies sufficiently to overcome the hurdle rate of return (basically the cost of capital) and make them competitive with advanced combined-cycle natural gas units, the most competitive, and relatively clean, current generating technology. According to the Coal Utilization Research Council, by the year 2020 clean coal technologies could achieve an efficiency of 49 percent and cost an average of $800/KW, suggesting at least a potential downward trend in cost. If cost declines occur — or if the capital costs of the next best alternative technology (probably the advanced natural gas combined cycle units) were to increase in the long term (or both) — some clean coal technologies might become more competitive without tax credits.

Clean coal technologies might also become more competitive if, for example, the price of natural gas were to increase either as a result of the additional use of advanced natural gas technologies or due to some unrelated market factor. However, electric utilities would have to make investment decisions based on current technologies and reasonable assessment of relative fuel prices in the near future. Without the investment tax credits, these considerations would seem to favor advanced natural gas combined-cycle units, and possibly some types of renewables such as wind power.

Uncertainty in commercial viability is another key factor inhibiting investment in these technologies. Costs are not likely to decline if risk remains high. Even if capital costs would fall, there is the additional problem of the risk of clean-coal technologies.

Rationale

The investment tax credits for clean coal technologies were established by the Energy Policy Act of 2005 (P.L. 109-58). The credits are designed to encourage the burning of coal in a more efficient and environmentally friendly manner. In addition to the tax credits, Congress has, since 1986, authorized billions of dollars to the Department of Energy (DOE) to demonstrate emerging clean coal technologies, particularly those that can substantially reduce SO_2 and NO_x to further control acid rain. The Energy Policy Act of 2005 also created a new loan guarantee program for clean coal technologies, and other clean energy technologies. They were intended to promote a technologically feasible electric generating technology that is

efficient, is environmentally less harmful than conventional coal fired generators, and relies on an abundant domestic energy resource. The provision relating to sub-bituminous coal was added by the Tax Relief and Health Care Act of 2006 (P.L. 109-432).

The Heartland, Habitat, Harvest, and Horticulture Act of 2008 (P.L. 110-246) directed the Treasury Secretary to modify the terms of any competitive certification award and any associated closing agreements in certain cases. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) provided $1.5 billion in new tax credits for investments in advanced coal electricity projects (IRC § 48A) and certain coal gasification projects (IRC § 48B) that demonstrate the greatest potential for carbon capture and sequestration technology. Of these $1.5 billion of incentives, $1.25 billion will be awarded to advanced coal electricity projects, and $250 million will be awarded to coal gasification projects. The law also clarified that gasification projects producing transportation grade liquid fuels are eligible for the tax credits under IRC §48B.

Assessment

The 20 percent investment tax credit reduces the levelized costs of the IGCC clean coal technology from $4.80/kWh to $4.15/kWh (in 2004 dollars). This is somewhat lower than the levelized costs of many other types of generating technologies, including conventional coal-fired units ($4.32/kWh). Despite some successful demonstrations, clean coal technologies are still generally economically unproven technologies in the sense that none have become commercial without significant subsidies. As a result, utilities may not have the confidence in them as compared to conventional systems or advanced natural gas combined cycle systems, which have a proven track record. Even if capital costs were lower, the unpredictability of the clean coal systems increases risks and possibly operating and maintenance costs to the utility, which may inhibit investment. Thus, even after they become competitively priced, it may take time — some estimate 5-10 years or more — to penetrate the market. Finally, even if the tax credits were to be effective in stimulating investment in clean coal technologies, such subsidies are an economically inefficient way of addressing either energy or environmental externalities.

Selected Bibliography

Brown, Marilyn, Benjamin K. Sovacool, and Richard F. Hirsh. "Assessing U.S. Energy Policy." *Daedalus* v. 135. Summer 2006, pp. 5- 12.

Fri, Robert W. "From Energy Wish Lists to Technological Realities." *Issues in Science and Technology*, v. 23, Fall 2006, pp. 63-69.

Metcalf, Gilbert E. *Federal Tax Policy Towards Energy.* Paper prepared for the NBER conference on Tax Policy and the Economy. September 14, 2006.

Lackner Klaus F. "The Conundrum of Sustainable Energy: Clean Coal as One Possible Answer." *Asian Economic Papers* v. 4. Fall 2005.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: July 28, 2006.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL30406. Washington, DC: June 28, 2005.

U.S. Congress, Joint Committee on Taxation. *Description and Technical Explanation of the Conference Agreement of H.R. 6, Title XIII, "The Energy Tax Incentives Act of 2005."* July 27, 2005.

U.S. Department of Energy. Office of Fossil Energy. *Clean Coal Today.* DOE/FE-0215P. Summer, 1998.

U.S. General Accounting Office. *Outlook for Utilities' Potential Use of Clean Coal Technologies.* GAO/RCED-90-165, May 1990, p.3.

U.S. Treasury Department. Internal Revenue Service. "Establishing Qualifying Advanced Coal Project Program." IRS Notice 2006-24. *Internal Revenue Bulletin.* March 13, 2006.

U.S. Treasury Department. Internal Revenue Service. "Updating Procedure for Allocating Credits Under Advanced Coal Project Program of IRC Section 48A." IRS Notice 2007-52. *Internal Revenue Bulletin.* June 7, 2007.

U.S. Treasury Department. Internal Revenue Service. "Credit Allocations Under Qualifying Advanced Coal Progra Section 48A." IRS Notice 2008-96. *Internal Revenue Bulletin.* October 8, 2008.

U.S. Treasury Department. Internal Revenue Service. "Deadline for Applications for 2007 Clean Coal Tax Credit Allocation." IRS News Release IR-2007-98. May 9, 2007.

U.S. Treasury Department. Internal Revenue Service. "Special Allocation Round for Coal-Based Integrated Gasification Combined Cycle Projects Under Section 48A." IRS Notice 2008-26. *Internal Revenue Bulletin.* February 13, 2008.

ELECTION TO EXPENSE 50 PERCENT OF QUALIFIED PROPERTY USED TO REFINE LIQUID FUELS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	[1]	0.4	0.4
2009	[1]	1.1	1.1
2010	[1]	0.9	0.9
2011	[1]	0.8	0.8
2012	[1]	0.6	0.6

[1] Less than $50 million.

Authorization

Section 168(l), 179C.

Description

Oil refineries are allowed to irrevocably elect to expense 50 percent of the cost of qualified refinery property, with no limitation on the amount of the deduction. The deduction would be allowed in the taxable year in which the refinery property is placed in service. The remaining 50 percent of the cost would remain eligible for regular cost recovery provisions. To qualify for the deduction, original use of the property must commence with the taxpayer and construction must be pursuant to a binding construction contract entered into after June 14, 2005, and before January 1, 2010. In the case of self-constructed property, construction must begin after June 14, 2005, and before January 1, 2010, or the refinery property is placed in service before January 1, 2010. The property must be placed in service before January 1, 2014; the property must meet certain production capacity requirements if it is an addition to an existing refinery; and the property must meet all applicable environmental laws when placed in service. With respect to the

production capacity requirements, there are two such requirements: refinery property investments much increase the total refinery capacity by 5%, and if the refinery processes non-conventional feed-stocks, the investment leads to an increase in capacity at a rate equal or greater to 25% of the total throughput of the refinery.

Certain types of refineries, including asphalt plants, would not be eligible for the deduction, and there is a special rule for sale-lease-backs of qualifying refineries. If the owner of the refinery is a cooperative, it may elect to allocate all or a part of the deduction to the cooperative owners, allocated on the basis of ownership interests. This provision is effective for qualifying refineries placed in service after date of enactment, which is August 8, 2005.

Small refiners are also allowed two other tax incentives: a $2.10/barrel tax credit for the production of low-sulfur diesel fuel that is in compliance with Environmental Protection Agency (EPA) sulfur regulations (IRC §45H); and expensing, in lieu of depreciation, for up to 75 percent of the capital costs incurred in producing low-sulfur diesel fuel that is in compliance with EPA sulfur regulations.

Impact

Under current depreciation rules (the Modified Accelerated Cost Recovery System) refinery assets are generally depreciated over 10 years using the double declining balance method. Allowing 50 percent of the cost of the refinery to be deducted immediately (expensed) rather than depreciated over the normal 10 year life reduces the cost of constructing a refinery by slightly under 5 percent for a taxpayer in the 35 percent tax bracket. The present value of a 10-year, double declining balance depreciation per dollar of investment is $0.74 with an 8 percent nominal discount rate. For every dollar expensed, the benefit of expensing is to increase the present value of deductions by $0.26, and since half of the investment is expensed, the value is $0.13. Multiplying this value by 35 percent leads to a 4.6 percent benefit as a share of investment. The value would be larger with a higher discount rate. For example, at a 10 percent discount rate, the benefit would be 5.4 percent. The benefit is smaller for firms with limited tax liability or lower tax rates.

Since the provision is temporary, there is an incentive to speed up the investment in refinery capacity so as to qualify it, unless the tax benefit is expected to be made permanent. Nevertheless, the incentive to speed up investment is limited, because the effective price discount is small. Investing in excess capacity that would not otherwise be desirable would either leave the plant idle or provide too much output and lower prices and profits for a period of time. The latter cost should be at least as big as the cost of remaining idle. With a five percent price discount, the interest cost of

carrying excess capacity or losing profits would roughly offset the tax credit's value within a year.

Refiners will, however, receive a windfall benefit on construction that would have taken place in the absence of the subsidy.

Rationale

This provision was enacted in the Energy Policy Act of 2005 (P.L. 109-58). Its purpose is to increase investments in existing refineries so as to increase petroleum product output, and reduce prices. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended both the refinery expensing contract requirement and the placed-in-service requirement for this expensing provision for two years. The law also allowed refineries that directly process shale or tar sands to qualify for this provision.

Assessment

Since the mid-1970s, the number of refineries has declined by over 50% — there are now 150 operable refineries in the United States; in 1982 there were 301. With the number of refineries shrinking, the growth in motor fuel demand has been met by growth in the size of the average refineries and by imports. This however has led to increased capacity utilization and a narrow margin between demand and aggregate industry capacity, which contributes to both higher domestic fuel prices and the potential for price spikes in the event some capacity goes off line due to maintenance, bad weather, or some other exigency. With fewer companies operating larger and larger refineries, the competitiveness of the industry has been questioned, which also has market price implications. The refinery expensing provision is intended to increase domestic refinery capacity, which would increase the supply of gasoline, diesel, and other motor fuels and relieve some of the upward price pressure in the markets in recent years.

Economic theory suggests, however, that capital investments should be treated in a neutral fashion to maximize economic well being. There is no obvious reason that the price of refined liquids should be subsidized, even for a temporary time. Indeed, there are pollution, congestion, and other external negative effects of the consumption of petroleum products that might suggest the reverse of a subsidy.

The transitory subsidy, if indeed it remains transitory, may not have lasting effects and may lead to investments being made more quickly, resulting either in wasted investment or temporarily lower prices. If the subsidy is continued, as has been the case with other tax provisions, then, absent other market distortions, over-consumption of petroleum products could occur.

The effect on refinery construction is difficult to estimate. The precise effect depends on the price elasticity of investment with respect to changes in costs. To illustrate, if such an elasticity were 1, then a 5.4 percent reduction in costs could be expected to increase refinery capital by 5.4 percent, which would translate into a roughly 900 thousand barrels per day. Such an increase, if it were to materialize, would increase domestic petroleum output and reduce prices. However, recent evidence regarding a similar provision for equipment in general including refineries (bonus depreciation), which applied from 2002 through 2004, indicated that the response was not as large as hoped for and that, indeed, many firms did not appear to take advantage of the provision. In addition, most estimates of the elasticity of investment response to a permanent change in the cost of capital goods suggest a fairly low response, on the order of 0.25, although one study has found a higher response of about 0.66.

Selected Bibliography

Andrews, Anthony. *Oil Shale: History, Incentives, and Policy*. Library of Congress, Congressional Research Service Report RL 33359. Washington, DC: April 13, 2006.

Chirinko, Robert S., Steven M. Fazzarri, and Andrew P. Meyer. "How Responsive is Business Capital Formation to its User Cost? An Exploration with Micro Data?" *Journal of Public Economics* vol. 74 (1999), pp. 53-80.

Cohen Darryl and Jason Cummins. *A Retrospective Evaluation of the Effects of Temporary Partial Expensing.* Federal Reserve Board Staff Working Paper 2006-19, April 2006.

Cordes, Joseph J. "Expensing," in the *Encyclopedia of Taxation and Tax Policy*, Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, eds (Washington: Urban Institute Press, 2005).

Energy Information Administration. *Refinery Outages: Description and Potential Impact on Petroleum Product Prices.* SR/OOG/2007-01.

Jason G. Cummins , Kevin A. Hassett, and R. Glen Hubbard, "A Reconsideration of Behavior Using Tax Reforms as Natural Experiments." *Brookings Papers on Economic Activity*, 1994, no. 1, pp. 1-72.

Guenther, Gary. *Small Business Expensing Allowance: Current Status, Legislative Proposals, and Economic Effects.* CRS Report RL31852, September 8, 2008.

Gravelle, Jane. *Economic Effects of Taxing Capital Income.* MIT Press, 1994.

Lazzari, Salvatore and Robert Pirog. *Oil Industry Financial Performance and the Windfall Profits Tax*. Library of Congress, Congressional Research Service Report RL34689. Washington, DC: September 30, 2008.

Lazzari, Salvatore. *Energy Tax Policy: History and Current Issues*. Library of Congress, Congressional Research Service Report RL33578. Washington, DC: September 22, 2008.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL30406. Washington, DC: June 28, 2005.

Pirog, Robert. *Petroleum Refining: Economic Performance and Challenges for the Future.* Congressional Research Service Report RL32248. Washington: June 3, 2008.

Sterner, Thomas. *Policy Instruments for Environmental and Natural Resource Management.* Resources for the Future, Washington, D.C. 2003.

U.S. Congress, Joint Committee on Taxation. *Description and Technical Explanation of the Conference Agreement of H.R. 6, Title XIII, "The Energy Tax Incentives Act of 2005."* July 27, 2005.

U.S. Department of the Treasury. Internal Revenue Service. *Accelerated cost recovery: Recovery Classes: Class lives: Recovery Periods*. Revenue Procedure 87-56, 1987-2 CB 674, (Oct. 19, 1987).

U.S. Department of the Treasury. Internal Revenue Service. *Qualified refinery property: Expense Election*. Proposed Regulations (REG-146895-05) (July 7, 2008).

U.S. Department of the Treasury. Internal Revenue Service *Refineries: Qualified Refinery Property: Expense Election.* T.D. 9412 (July 3, 2008).

CREDIT FOR HOLDERS OF CLEAN RENEWABLE ENERGY BONDS AND QUALIFIED ENERGY CONSERVATION BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	0.1	0.1
2010	([1])	0.1	0.1
2011	([1])	0.1	0.1
2012	([1])	0.1	0.1

([1]) Less than $50 million.

Authorization

Section 54.

Description

Clean renewable energy bonds (CREBs) are available for the finance of qualified energy production projects which include: (1) wind facilities, (2) closed-loop bio-mass facilities, (3) open-loop bio-mass facilities, (4) geothermal or solar energy facilities, (5) small irrigation power facilities, (6) landfill gas facilities, (7) trash combustion facilities, and (8) refined coal production facilities. Holders of CREBs can claim a credit equal to the dollar value of the bonds held multiplied by a credit rate determined by the Secretary of the Treasury. There are two types of CREBs. The original CREBs offered a credit rate equal to the percentage that will permit the bonds to be issued without discount and without interest cost to the issuer. The national limit on the original CREBs is $1.2 billion, of which a maximum of $750 million could be granted to governmental bodies (the remainder would go to utilities). The bonds must be issued before December

31, 2009. The credit rate is equal to the rate that will permit the bonds to be issued without discount and without interest cost to the issuer.

The "new" CREBs for the same purpose were created by the Emergency Economic Stabilization Act of 2008 (EESA P.L. 110-343). In contrast to the original CREBs, the credit rate on new CREBs is 70% of the credit rate offered on the old CREBs. Up to $800 million of new CREBs can be issued before December 31, 2009. Not more than one-third of new CREBs may be allocated to any of the following: (1) public power providers, (2) governmental bodies, or (3) projects of cooperative electric companies.

EESA also created Qualified Energy Conservation Bonds (QECBs) and established a national limit of $800 million for QECBs. Similar to new CREBs, these tax credit bonds offer a credit rate that is 70% of the credit rate offered on old CREBs and other tax credit bonds. These bonds are to be used for capital expenditures for the purposes of: (1) reducing energy consumption in publicly-owned buildings by at least 20 percent; (2) implementing green community programs; (3) rural development involving the production of the electricity from renewable energy resources; or (4) programs listed above for CREBs. Also included are expenditures on research facilities and research grants, to support research in: (1) development of cellulosic ethanol or other nonfossil fuels; (2) technologies for the capture and sequestration of carbon dioxide produced through the use of fossil fuels; (3) increasing the efficiency of existing technologies for producing nonfossil fuels; (4) automobile battery technologies and other technologies to reduce fossil fuel consumption in transportation; and (5) technologies to reduce energy use in buildings. Energy saving mass commuting facilities and demonstration projects are also included in the list of qualified purposes.

The maximum maturity of both new CREBs, old CREBs, and QECBs is that which will set the present value of the obligation to repay the principal equal to 50 percent of the face amount of the bond issue. The discount rate for the calculation is the average annual interest rate on tax-exempt bonds issued in the preceding month, having a term of at least 10 years. CREBs and QECBs are subject to arbitrage rules that require the issuer to spend 95 percent of the proceeds within five years of issuance.

Impact

The interest income on bonds issued by State and local governments usually is excluded from Federal income tax (see the entry "Exclusion of Interest on Public Purpose State and Local Debt"). Such bonds result in the Federal government paying a portion (approximately 25 percent) of the issuer's interest costs. The original CREBs are structured to have the entire interest cost of the State or local government paid by the Federal Government in the form of a tax credit to the bond holders. The new CREBs

and QECBs are structured such that 70 percent of the interest cost is paid by the Federal government. Neither type of CREBs or QECBs are tax-exempt bonds. The cost has been capped at the value of Federal tax credits generated by the $1.2 billion for the original CREBs, $800 million for the new CREBs, and $800 million for QECBs.

Rationale

Proponents of CREBs and QECBs argue that the Federal subsidy is necessary because private investors are unwilling to accept the risk and relatively low return associated with renewable energy and energy conservation projects. Proponents argue that the market has failed to produce investment in renewable energy and conservation because the benefits of these projects extend well beyond the service jurisdiction to the surrounding community and to the environment more generally. The rate payers of the utility are not compensated for these external benefits, and it is unlikely, proponents argue, that private investors would agree to provide them without some type of inducement. The program was introduced in 2005 (P.L. 109-58); P.L. 109-432, enacted in December of 2006, increased the capacity amount by $400 million and extended issuance authority through 2008. P.L. 110-343 extended CREBs issuing authority through 2009 and added $800 for a new CREB and $800 million for QECBs with a smaller Federal subsidy (the credit is 70 percent of the credit amount on the original CREBs).

Assessment

The legislation (P.L. 109-58) that created the original CREBs was enacted on August 8, 2005, and the potential success of the program is still uncertain. One way to think of this alternative subsidy is that investors can be induced to purchase these bonds if they receive the same after-tax return from the credit that they would from the purchase of tax-exempt bonds. The value of the credit is included in taxable income, but is used to reduce regular or alternative minimum tax liability. Assuming the taxpayer is subject to the regular corporate income tax, the credit rate should equal the ratio of the purchaser's forgone market interest rate on tax-exempt bonds divided by one minus the corporate tax rate. For example, if the tax-exempt interest rate is 6 percent and the corporate tax rate is 35 percent, the credit rate would have to be equal to .06/(1-.35), or about 9.2 percent to induce investment. Thus, an investor purchasing a $1 million original CREB would need to receive a $92,000 annual tax credit each year. For new CREBs and QECBs, the tax credit is 70 percent of that amount or $64,400. The issuer would pay interest of at least $27,600 to match the taxable bond alternative (e.g., the $92,000).

With the original CREBs, the Federal government pays 100 percent of interest costs. One alternative, government issued tax-exempt bonds, have only a portion of interest costs subsidized by the Federal Government. For example, if the taxable bond rate is 9.2 percent and the tax-exempt rate is 6 percent, the issuer of the tax-exempt bond receives a subsidy equal to 3.2 percentage points of the total interest cost, the difference between 9.2 percent and 6 percent. The original CREB receives a subsidy equal to all 9.2 percentage points of the interest cost. Thus, CREBs reduce the price of investing in renewable energy projects compared to investing in other public services provided by governments. In addition, with original CREBs, the entire subsidy (the cost to the Federal taxpayer) is received by the issuing government (or utility) through reduced interest costs. The new CREBs and QECBs reduce the Federal subsidy to 70 percent of the original CREBs. This reduced subsidy amount reduces the incentive to the issuer but does not change the expected return to the investor. There is, however, a slight increase in the default risk as the issuer assumes responsibility for a portion of interest payments.

In contrast, with tax-exempt bonds, part of the Federal revenue loss is a windfall gain for some wealthy investors. The Federal revenue loss, and thus benefit, is not fully captured by the issuing government.

Selected Bibliography

Congressional Budget Office, *Tax Credit Bonds and the Federal Cost Financing Public Expenditures*, July 2004.

Davie, Bruce, "Tax Credit Bonds for Education: New Financial Instruments and New Prospects," *Proceedings of the 91st Annual Conference on Taxation*, National Tax Association.

Joint Committee on Taxation, *General Explanation of Tax Legislation Enacted in 1997*, Joint Committee Print JCS-23-97, December 17, 1997, 40-41.

Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

Maguire, Steven. *Tax Credit Bonds: A Brief Explanation.* Library of Congress, Congressional Research Service Report RS20606, August 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638, March 2008.

Matheson, Thornton. "Qualified Zone Academy Bond Issuance and Investment: Evidence from 2004 Form 8860 Data," *Statistics of Income Bulletin*, Internal Revenue Service, Spring 2007, pp. 155-162.

AMORTIZATION OF CERTIFIED POLLUTION CONTROL FACILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.1	0.1
2009	([1])	0.1	0.1
2010	([1])	0.1	0.1
2011	([1])	0.2	0.2
2012	([1])	0.2	0.2

(1) Negative tax expenditure of less than $50 million.

Authorization

Section 169(d)(5).

Description

This provision makes the pre-1976 5-year option to amortize investments in pollution control equipment for coal-fired electric generation plants available to those plants placed in service on or after January 1, 1976. Before enactment of IRC section 169(d)(5), 5-year amortization of pollution control equipment applied only to older coal-fired power plants — those placed in service before January 1, 1976. However, investments in pollution control equipment made in connection with post-1975 power plants now qualify for amortization over seven years rather than five years. The 5-year amortization incentive for pre-1976 plants applies only to pollution control equipment with a useful life of 15 years or less. In that case 100% of the cost can be amortized over five years. If the property or equipment has a useful life greater than 15 years, then the proportion of the costs that can be amortized over five years is less than 100%.

Qualifying pollution control equipment means any technology that is installed in or on a qualifying facility to reduce air emissions of any pollutant regulated by the Environmental Protection Agency (EPA) under the Clean Air Act. This includes scrubber systems, particulate collectors and removal equipment (such as electrostatic precipitators), thermal oxidizers, vapor recovery systems, low nitric oxide burners, flare systems, bag houses, cyclones, and continuous emission monitoring systems. The pollution control equipment needs to have been placed in service after April 11, 2005.

Impact

In the federal tax code, amortization is a method of depreciation that recovers the total cost basis evenly (i.e., straight line depreciation) over the recovery period, in this case either five or seven years depending on the age of the power plant. In either case, however, because the two recovery periods are substantially less than the economic life of the assets, such amortization provides more accelerated depreciation deductions for pollution control equipment than would otherwise be the case under the Modified Accelerated Cost Recovery System (MACRS), in which the recovery period for the conventional type of electric generating equipment is either 15 or 20 years, depending on the type of equipment. The recovery period is 15 years for generating equipment that uses internal combustion, jet, or diesel engines; 20 years for most types of conventional electric utility tangible property such as steam or gas turbines, boilers, combustors, condensers, combustion turbines operated in a combined cycle with a conventional steam unit, and related assets. The shorter period for internal combustion engines is because this type of equipment typically deteriorates faster than conventional coal-fired equipment. Also the recovery method is one of the more accelerated types: either the double-declining balance method or the 150% declining balance method. Amortization in this way thus provides more accelerated depreciation deductions for pollution control equipment than does MACRS. Because of the time value of money, the earlier deduction is worth more in present value terms, which reduces the cost of capital and the effective tax rates on the investment returns. This should provide an incentive for power plant companies (primarily the tax paying investor-owned utilities, or IOUs) to invest in pollution control equipment.

This provision targets electric utilities, a major source of the disproportionate amount of air pollution. And while older coal plants still emit a disproportionate amount of pollution among all coal-fired plants, the provision complements prior law by also targeting emissions from newer plants. The incentive will facilitate utilities in meeting a new suite of EPA mandates to reduce emissions of sulfur dioxide (SO_2), nitrous oxide (NO_2), and mercury (Hg)

Rationale

This provision was part of the Energy Policy Act of 2005 (P.L. 109-58). Before that, investments in pollution control equipment for pre-1976 coal-fired plants were amortizable over 5 years. Before the 2005 act, pollution control equipment added to "newer" plants (those placed in service after 1975) was depreciated using the same MACRS methods that apply to other electric generating equipment on the date they are placed in service (15- or 20-year recovery period using the 150% declining balance method, as discussed below). The 5-year amortization of pollution control equipment was added by the Tax Reform Act of 1969 to compensate for the loss of the investment tax credit, which was repealed by the same act. Prior to 1987, pollution control equipment could be financed by tax-exempt bonds. This benefitted all types of electric utilities and not just public power companies, because although the state or local government would issue the bonds, the facilities were leased back to the IOUs or cooperatives. Billions of dollars of pollution control equipment were financed in this way until the safe-harbor leasing tax rules were repealed by the Tax Reform Act of 1986.

Assessment

Pollution control equipment used in connection with coal-fired power plants is a significant fraction of a plant's cost. Thus, the tax treatment of this type of equipment is important in determining the investment decisions of the electric utility. The Clean Air Act's "New Source Review" provisions require the installation of state-of-the-art pollution-control equipment whenever an air-polluting plant is built or when a "major modification" is made on an existing plant. By creating a more favorable (in some cases much more favorable) regulatory environment for existing facilities than new ones, grandfathering creates an incentive to keep old, grandfathered facilities up and running.

The federal tax code has also provided an unintended incentive to retain — a disincentive to scrap — equipment and other business assets. One of these tax provisions is the 5-year amortization of pollution control equipment connected with older (pre-1976) power plants. This, and other provisions under prior law (such as accelerated depreciation and investment tax credits), and current tax penalties for premature dispositions of capital equipment under the recapture provisions and the alternative minimum tax) may have provided a disincentive to invest in new equipment and other new assets.

Selected Bibliography

Abel, Amy. *Energy Policy Act of 2005, P.L. 109-58: Electricity Provisions*. Congressional Research Service Report RL33248. Washington, DC: January 24, 2006.

Hsu, Shi-Ling. "What's Old Is New: The Problem with New Source Review." *Regulation.* Spring 2006. v. 29. Washington: pp. 36-43.

Joskow, Paul L. "Competitive Electricity Markets and Investment in New Generating Capacity," *MIT Research Paper*. April, 28, 2006.

Joskow, Paul L. *Transmission Policy in the United States.* AEI-Brookings Joint Center for Regulatory Studies. October 2004.

Joskow, Paul L. "Restructuring, Competition, and Regulatory Reform in the U.S. Electricity Sector," *Journal of Economic Perspectives*. Summer 1997. pp. 119-138.

Lee, Amanda I., and James Alm. "The Clean Air Act Amendments and Firm Investment in Pollution Abatement Equipment." *Land Economics*. August 2004. v. 80. pp. 433.

McCarthy, James E., and Larry Parker. *Costs and Benefits of Clear Skies: EPA's Analysis of Multi-Pollutant Clean Air Bills.* U.S. Library of Congress. Congressional Research Service Report RL33165. November 23, 2005.

Parker, Larry, and John Blodgett. *Air Quality and Electricity: Enforcing New Source Review*. U.S. Library of Congress. Congressional Research Service Report RL30432. January 31, 2000.

Popp, David. "Pollution Control Innovations and the Clean Air Act of 1990." *Journal of Policy Analysis and Management*. Fall 2003. v. 22. pp. 641.

Sterner, Thomas. *Policy Instruments for Environmental and Natural Resource Management.* Resources for the Future, Washington. 2003.

U.S. Congress, Joint Committee on Taxation. *Federal Tax Issues Relating to Restructuring of the Electric Power Industry.* Hearing before the Subcommittee on Long-Term Growth and Debt Reduction of the Senate Finance Committee, October 15, 1999. JCX 72-99.

EXCLUSION OF CONTRIBUTIONS IN AID OF CONSTRUCTION FOR WATER AND SEWER UTILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	([1])	([1])
2009	-	([1])	([1])
2010	-	([1])	([1])
2011	-	([1])	([1])
2012	-	([1])	([1])

([1])Less than $50 million.

Authorization

Section 118(c),(d).

Description

Contributions in aid of construction are charges paid by utility customers, usually builders or developers, to cover the cost of installing facilities to service housing subdivisions, industrial parks, manufacturing plants, etc. In some cases, the builder/developer transfers completed facilities to the utility rather than paying cash to the utility to finance construction of the facilities.

Qualifying contributions in aid of construction received by regulated water and sewage disposal utilities which provide services to the general public in their service areas are not included in the utilities' gross income if the contributions are spent for the construction of the facilities within 2 years after receipt of the contributions. Service charges for starting or stopping services do not qualify as nontaxable capital contributions. Assets purchased with (or received as) qualifying contributions have no basis (hence, cannot

be depreciated by the utility) and may not be included in the utility's rate base for rate-making purposes.

Impact

Before the Tax Reform Act of 1986 (TRA86), the special treatment described above applied to contributions in aid of construction received by regulated utilities that provide steam, electric energy, gas, water, or sewage disposal services. This treatment effectively exempted from taxation the services provided by facilities financed by contributions in aid of construction. The treatment was repealed by TRA86 but reinstated by the Small Business Job Protection Act of 1996 for water and sewage facilities only.

Repeal of the special treatment resulted in increases in the amounts utilities charge their customers as contributions in aid of construction. Before TRA86, a utility would charge its customers an amount equal to the cost of installing a facility. After TRA86, utilities had to charge an amount equal to the cost of the facility plus an amount to cover the tax on the contribution in aid of construction. This parallels the pricing of most other business services, for which companies must charge customers the actual cost of providing the service plus an amount to cover the tax on the income.

The higher cost associated with contributions in aid of construction as a result of the change in the TRA86 led to complaints from utility customers and proposals to reverse the change. The special treatment of contributions in aid of construction was reinstated — but only for water and sewage utilities — in the Small Business Job Protection Act of 1996. As a result of this reinstatement, water and sewage utility charges for contributions in aid of construction are lower than they would be if the contributions were still taxable. The charge now covers only the cost of the financed facility; there is no markup to cover taxes on the charge.

To the extent that the lower charges to builders and developers for contributions in aid of construction are passed on to ultimate consumers through lower prices, the benefit from this special tax treatment accrues to consumers. If some of the subsidy is retained by the builders and developers because competitive forces do not require it to be passed forward in lower prices, then the special tax treatment also benefits the owners of these firms.

Rationale

The stated reason for reinstating the special treatment of contributions in aid of construction for water and sewage utilities was concern that the changes made by the Tax Reform Act of 1986 may have inhibited the

development of certain communities and the modernization of water and sewage facilities.

Assessment

The contribution in aid of construction tax treatment allows the utility to write off or expense the cost of the financed capital facility in the year it is put in place rather than depreciating it over its useful life. This treatment, in effect, exempts the services provided by the facility from taxation and thereby provides a special subsidy. Absent a public policy justification, such subsidies distort prices and undermine economic efficiency.

In repealing the special tax treatment of contributions in aid of construction in TRA86, Congress determined that there was no public policy justification for continuing the subsidy. In reinstating the special tax treatment for water and sewage utilities in the Small Business Job Protection Act of 1996, Congress determined that there was an adequate public policy justification for providing the subsidy to these particular utilities.

Selected Bibliography

Committee on Finance, *Small Business Job Protection Act of 1996*, Report 104-281, U.S. Senate, 104th Congress, 2d Session, June 18, 1996, pp. 136-137.

Conference Report, *Small Business Job Protection Act of 1996*, Report 104-737, U.S. House of Representatives, 104th Congress, 2d Session, August 1, 1996, pp. 158-160.

Joint Committee on Taxation, *General Explanation of the Tax Reform Act of 1986*, Joint Committee Print, JCS-10-87, May 4, 1987, pp. 544-547.

REFUND OF DEEMED TAX PAYMENT TO ALLOCATEE OF QUALIFIED FORESTRY CONSERVATION BOND

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	-	-
2009	-	0.3	0.3
2010	-	-	-
2011	-	-	-
2012	-	-	-

Authorization

Section 54B.

Description

The Food, Conservation, and Energy Act of 2008 (P.L. 110-234) created "qualified forestry conservation bonds" (FCBs), a new type of tax credit bond. Generally, governments and non-profit entities would issue the bonds and use the bond proceeds to buy forest land. The FCBs are intended to encourage the purchase and conservation of forest land by governments and non-profit entities.

For purposes of the FCB program, a qualified forestry conservation purpose must meet the following qualifications:

(1) Some portion of the land acquired must be adjacent to United State Forest Service Land.
(2) At least half of the land acquired must be transferred to the United States Forest Service at no net cost to the United States and not more than half of the land acquired may either remain with or be conveyed to a State.

(3) All of the land must be subject to a native fish habitat conservation plan approved by the United States Fish and Wildlife Service.
(4) The amount of acreage acquired must be at least 40,000 acres.

FCBs are limited to $500 million to be allocated before May 22, 2010 (24 months after enactment of P.L. 110-234). A qualified issuer is a "State or any political subdivision or instrumentality thereof or a 501(c)(3) organization." Once the bonds are issued, the proceeds must be spent within three years. A unique feature of FCBs is the allowance for an issuer to characterize up to 50% of its allocation amount as though it had been a federal tax payment for the previous year. The legislation then provides that the Treasury cannot collect these payment from such entities. Thus, the Treasury is then required to "refund" the phantom tax payment (i.e., up to 50% of the bond allocation) to the allocatee. This forms the basis of the revenue loss amount for this tax expenditure.

Holders of forestry conservation bonds (FCBs) can claim a credit equal to the dollar value of the bonds held multiplied by a credit rate determined by the Secretary of the Treasury. The credit rate is equal to the percentage that will permit the bonds to be issued without discount and without interest cost to the issuer. The maximum maturity of the bonds is that which will set the present value of the obligation to repay the principal equal to 50 percent of the face amount of the bond issue. The discount rate for the calculation is the average annual interest rate on tax-exempt bonds issued in the preceding month having a term of at least 10 years.

The term of the bonds is determined by the current interest rate. The statutory restriction is that the term "shall be the term which the Secretary estimates will result in the present value of the obligation to repay the principal on the bond being equal to 50% of the face amount of the bond." Specifically, the maximum term of the bonds is determined by the prevailing interest rate for municipal debt with a maturity of greater than 10 years.

Impact

The interest income on bonds issued by State and local governments and some non-profit entities (e.g., hospitals) usually is excluded from Federal income tax (see the entry "Exclusion of Interest on Public Purpose State and Local Debt"). Such bonds result in the Federal Government paying a portion (approximately one-quarter) of the issuer's interest costs. In contrast, FCBs, like other tax credit bonds, are structured to have the entire interest cost of the issuer paid by the Federal Government in the form of a tax credit to the bond holders. The interest rate subsidy along with the tax refund provision may be effective in inducing the conservation of more forest land.

The cost has been capped at the value of federal tax credits generated by the $500 million FCB volume. The tax refund creates a tax expenditure

because businesses are more likely to sell land to an issuer that has been granted a "refund." No allocations or refunds have been made as of this writing.

Rationale

The intent of the FCBs is to encourage the conservation of forest land. Two very generous tax provisions are the primary incentive. The innovative means of providing a tax benefit to otherwise non-taxable entities will have the economic effect of a direct grant or transfer to these entities. The tax credit bonds also confer a considerable subsidy to issuers.

Assessment

One way to think of tax credit bonds is that financial institutions can be induced to purchase these bonds if they receive the same after-tax return from the credit that they would from the purchase of tax-exempt bonds. The value of the credit is included in taxable income, but is used to reduce regular or alternative minimum tax liability. Assuming the taxpayer is subject to the regular corporate income tax, the credit rate should equal the ratio of the purchaser's forgone market interest rate on tax-exempt bonds divided by one minus the corporate tax rate. For example, if the tax-exempt interest rate is 6 percent and the corporate tax rate is 35 percent, the credit rate would be equal to .06/(1-.35), or about 9.2 percent. Thus, a financial institution purchasing a $1,000 FCB would receive a $92 tax credit for each year it holds the bond.

The tax refund provision is unique and is almost indistinguishable (in economic impact) from a direct grant or transfer. Using the tax code to provide direct transfers to individuals or entities may be criticized as counter to the intent of the tax system which is to raise revenue. Critics will suggest that activities so closely resembling direct spending should be subject to the same procedures as deliberation as all other spending decisions.

Selected Bibliography

Congressional Budget Office, *Tax Credit Bonds and the Federal Cost Financing Public Expenditures*, July 2004.

Davie, Bruce, "Tax Credit Bonds for Education: New Financial Instruments and New Prospects," *Proceedings of the 91st Annual Conference on Taxation*, National Tax Association.

Joint Committee on Taxation, *Present Law and Issues Related to Infrastructure Finance,* Joint Committee Print JCX-83-08, October 29, 2008.

Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

Joint Committee on Taxation, *General Explanation of Tax Legislation Enacted in 1997*, Joint Committee Print JCS-23-97, December 17, 1997, 40-41.

Maguire, Steven. *Tax Credit Bonds: A Brief Explanation.* Library of Congress, Congressional Research Service Report RS20606. August 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

Matheson, Thornton. "Qualified Zone Academy Bond Issuance and Investment: Evidence from 2004 Form 8860 Data," *Statistics of Income Bulletin*, Internal Revenue Service, Spring 2007, pp. 155-162.

SPECIAL TAX RATE FOR NUCLEAR DECOMMISSIONING RESERVE FUND

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.7	0.7
2009	-	0.8	0.8
2010	-	0.8	0.8
2011	-	0.9	0.9
2012	-	1.0	1.0

Authorization

Section 468A.

Description

Taxpayers who are responsible for the costs of decommissioning nuclear power plants (e.g., utilities) can elect to create reserve funds to be used to pay for decommissioning. The funds receive special tax treatment: amounts contributed to a reserve fund are deductible in the year made and are not included in the taxpayer's gross income until the year they are distributed, thus effectively postponing tax on the contributed amounts. Amounts actually spent on decommissioning are deductible in the year they are made. The fund's investments, however, are subject to a 20% tax rate — a lower rate than that which applies to most other corporate income. The amount that can be contributed to an account is the amount the Internal Revenue Service (IRS) determines would provide funding for the actual decommissioning costs when they occur.

Impact

As noted above, amounts contributed to a qualified fund are deductible in the year contributed but are taxed when withdrawn to pay for decommissioning costs. By itself, such treatment would constitute a tax deferral. However, full taxation of the investment earnings of the tax-deferred funds (the treatment that applied before 1992) would offset any benefit from the deferral. Accordingly, taken alone, only current law's reduced tax rate poses a tax benefit.

But an additional issue is whether the favorable tax treatment accorded to the funds simply compensates for other, unfavorable, tax treatment of decommissioning costs. Under current law there is a tax penalty associated with decommissioning because outlays for nuclear decommissioning are not permitted to be deducted until they are actually made. To the extent a taxpayer incurs a liability for those costs in advance of the outlays, this treatment constitutes a tax penalty similar to a reverse tax deferral; accurate treatment would require the costs to be deducted to reflect the loss in value of the plant as the required outlay becomes closer in time.

The likely economic effect of the reduced rates is to encourage outlays on nuclear decommissioning because the tax-saving funds are contingent on making such outlays. At the same time, however, to the extent that decommissioning costs are required by government regulations to be incurred with or without the special tax treatment, the reduced rates pose an incentive to invest in nuclear power plants. The benefit of the favorable tax treatment likely accrues to owners of electric utilities that use nuclear power and to consumers of the electricity they produce.

Rationale

The special decommissioning funds were first enacted by the Deficit Reduction Act of 1984 (Public Law 98-369), but the funds' investment earnings were initially subject to tax at the highest corporate tax rate (46%, at the time). The funds were established because Congress believed that the establishment of segregated reserve funds was a matter of "national importance." At the same time, however, Congress "did not intend that this deduction should lower the taxes paid by the owners...in present value terms," and thus imposed full corporate taxes on funds' investment earnings.

The reduced tax rate was enacted by the Energy Policy Act of 1992 (Public Law 102-486). The rate was reduced to provide "a greater source of funds" for decommissioning expenses. Congress in 2000 approved a measure that would eliminate the "cost of service" limitation on contributions to funds (leaving intact, however, the limit posed by the IRS determination). The Energy Tax Incentives Act of 2005 (Public Law 109-

58) modified the rules on the contribution limits to allow larger deductible contributions to a decommissioning fund.

Assessment

As noted above, the reduced tax rates may provide a tax benefit linked with amounts contributed to qualified funds. The impact of the resulting tax benefit on economic efficiency depends in part on the effect of non-tax regulations governing decommissioning. Nuclear powerplants that are not appropriately decommissioned might impose external pollution costs on the economy that are not reflected in the market price of nuclear energy. To the extent government regulations require plants to be shut down in a manner that eliminates pollution, this "market failure" may already be corrected and any tax benefit is redundant. To the extent regulations do not require effective decommissioning, the tax benefit may abet economic efficiency by encouraging decommissioning outlays. The equity effect of the tax benefit is distinct from regulatory fixes of pollution. It is likely that decommissioning costs required by regulation are borne by utility owners and consumers of nuclear energy. The tax benefit probably shifts a part of this burden to taxpayers in general. Note also, however, that the reduced rates may simply compensate for the delayed deduction of decommissioning costs.

Selected Bibliography

Khurana, Inder K., Richard H. Pettway, and K.K. Raman. "The Liability Equivalence of Unfunded Nuclear Decommissioning Costs." *Journal of Accounting and Public Policy*, vol. 20, no. 2, Summer 2001.

Palmer, Stephen L. "A Suggestion for Federal Tax Treatment of Accrued Nuclear Power Plant Decommissioning Expenses." *Tax Lawyer* 35 (Spring 1982), pp. 779-797.

U.S. Congress, Joint Committee on Taxation. *Federal Tax Issues Relating to Restructuring of the Electric Power Industry*. Joint Committee Print, 106th Congress, 1st session. Washington, DC: Government Printing Office, October 15, 1999, pp. 39-43.

— . *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Joint Committee Print, 98th Congress, 2d Session. Washington, DC: Government Printing Office, 1971, pp. 270-272.

— . *General Explanation of Tax Legislation Enacted in the 109th Congress.* Joint Committee Print,109th Congress, 2d Session. Washington, DC: Government Printing Office, 2007, pp. 32-35.

U.S. Department of the Treasury. *General Explanations of the Administration's Fiscal Year 2001 Revenue Proposals.* Washington, DC: 2000, pp. 117-118.

U.S. General Accounting Office, *Nuclear Regulation: NRC Needs More Effective Analysis to Ensure Accumulation of Funds to Decommission Nuclear Power Plants*. Report GAO-04-32, October 2003.

Zimmerman, Raymond A. and Jeri Farrow. "Decommissioning Funds: Snagged on Tax Law?" *Public Utilities Fortnightly* 139 (April 1, 2001), pp. 34.

GAIN OR LOSS IN THE CASE OF TIMBER, COAL, OR DOMESTIC IRON ORE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.4	—	0.4
2009	0.4	—	0.4
2010	0.4	—	0.4
2011	0.4	—	0.4
2012	0.4	—	0.4

Authorization

Sections 631, 1221, and 1231.

Description

A taxpayer who has held standing timber or the right to cut timber for a year may elect to treat the income as a capital gain. Capital gains treatment can also apply to a stand of timber and to timber as cut by the buyer. Timber includes ornamental evergreens that are at least six years old when severed from the roots.

Owners of coal mining or iron ore rights who lease their property typically retain an economic interest in production. If the asset has been held for more than a year prior to disposition (i.e. mining), income may be treated as a capital gain. In such cases, percentage depletion is not available to the lessor as long as the tax rate on capital gains is lower than the ordinary rate.

Impact

Capital gains treatment only benefits individuals, since corporate capital gains are taxed at ordinary rates. (A special temporary exception has been made for timber, which is discussed in the entry "Special Tax Rate for Qualified Timber Gain"). Because of the graduated individual rate structure, the flat capital gains tax rate is most beneficial for higher income individuals.

The capital gains treatment of the cutting and sale of timber constitutes a departure from the general rule that sale of a taxpayer's inventory yields ordinary income. However, while timber is inventory, it is usually held substantially longer than other types of inventory.

Some of a timber owner's costs which maintain and improve his trees, such as disease control and thinning may be expensed currently even though they are related to income which will only be recognized many years into the future. Therefore timber ownership offers opportunities for some taxpayers to deduct current expenses associated with such ownership against ordinary income from other sources.

For coal and iron ore, the benefit is offset by the loss of percentage depletion. Since percentage depletion is limited to 50% of net income and is in excess of cost depletion, the capital gains treatment, at current rates, is more beneficial even when percentage depletion is large relative to net income for high income taxpayers. (The current maximum rate is 15%, less than half the top individual income tax rate of 35%).

Rationale

Treatment of gain from cutting timber was adopted in 1943, in part to equalize the treatment of those who sold timber as a stand (where income would automatically be considered a capital gain) and those who cut timber. It was also suggested that this treatment would encourage conservation of timber through selective cutting and that taxing the capital gain at ordinary rates was unfair because of the comparatively long development time of timber. Capital gains treatment for coal royalties was added in 1951 to make the treatment of coal lessors the same as that of timber lessors, to provide benefits to long-term lessors with low royalties who were unlikely to benefit from percentage depletion, and to encourage coal production. Similar treatment of iron ore was enacted in 1964 to make the treatment consistent with coal and to encourage production of iron ore in response to foreign competition.

Assessment

In general, investments should be treated in a neutral fashion to maximize economic efficiency unless there are market failures (such as external benefits) that justify such subsidies. The industries eligible for the special tax treatment already tend to be favored in many ways. The effective tax burden on these activities is already low due to the ability to expense many of the costs of exploration and production.

One could argue that subsidizing timber is desirable to the extent that it increases the willingness to replant timber stands since forests may contribute to environmental quality. Unlike expensing provisions that allow the deduction of costs of developing and maintaining a timber stand, the capital gains treatment does not distinguish between cutting old growth timber and planting new stands. Deforestation is a contributor to climate change and to the extent that the provision encourages cutting of existing timber, the provision could be harmful to the environment.

Arguments are sometimes made to justify subsidies to mining on the basis of risk and protection of domestic industry, but it is unclear whether these problems represent true present market failures, and these industries also may have negative environmental effects.

A case is sometimes made for lowered taxes that are triggered on realization, such as those on the cutting of timber, because of a lock in effect. In the case of timber, trees may be held past the optimal maturity, although these issues are likely to be less severe than those associated with other assets (whose growth in value may continue without decline). (See entry on reduced rates of tax on dividends and capital gains.)

Selected Bibliography

Agria, Susan. "Special Tax Treatment of the Minerals Industries," in Arnold C. Harberger and Martin J. Bailey, eds. *The Taxation of Income from Capital*, Washington, D.C., The Brookings Institution, 1969, pp. 77-122.

Gorte, Ross W. and Jonathan M. Ranseur, *Forest Carbon Markets: Potentials and Drawbacks*, Congressional Research Service Report Rl34560, 2008.

Gorte, Ross W. and Pervaze A. Sheikh, and Jessica Seidener, *Climate Change and International Deforestation: Legislative Analysis*, Congressional Research Service Report RL34634, 2008.

Sunley, Emil M. "The Federal Tax Subsidy of the Timber Industry," in U.S. Congress, Joint Economic Committee, *The Economics of Federal Subsidy Programs*, Part 3 — Tax Subsidies, July 1972, pp. 317-342.

SPECIAL DEPRECIATION ALLOWANCE FOR CERTAIN REUSE AND RECYCLING PROPERTY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 168.

Description

Certain reuse and recycling property is eligible for a special depreciation allowance that allows 50% of the cost to be expensed when incurred. The remainder is depreciated based on the regular class life. To qualify, the property must be machinery and equipment, not including buildings but including software necessary to operate the equipment, used exclusively to collect, distribute, or recycle qualified reuse and recyclable materials. Recycling equipment includes property used for sorting. It does not include rolling stock or other equipment used to transport reuse and recyclable materials. Reuse and recyclable material means scrap plastic, scrap glass, scrap textiles, scrap rubber, scrap packaging, recovered fiber, scrap ferrous and nonferrous metals, or electronic scrap generated by an individual or business. Electronic scrap includes cathode ray tubes, flat panel screens, or similar video display devices with a screen size greater than 4 inches measured diagonally, or central processing units. Property must have a

useful life of at least five years. It applies to property placed into service (or with construction begun in the case of self-constructed property) after August 31, 2008.

Impact

Allowing half the cost to be expensed when incurred provides a benefit because a tax deduction today is worth more than a tax deduction in the future, because of the time value of money (interest). Expensing produces the same reduction in effective tax rate regardless of the durability of the asset as long as current depreciation reflects economic decline and thus is neutral. The effective tax rate is u(1-x)/(1-ux), where x is the share expensed and u is the statutory tax rate; in the case of 50% expensing and a 35% tax rate the effective tax rate falls by 40% to an effective 21% rate. Since most equipment assets are estimated to have depreciation more generous than economic depreciation, both beginning and effective tax rates are lower and the reduction proportionally less.

Although producing a relatively neutral reduction in the tax rate, reductions in tax burden reduce the cost of operating proportionally more for long lived assets because the rate of return is more important in cost for more durable facilities. One way to express this difference is in the rental price (or payment that would be required to rent an asset). It is closely related to an equivalent reduction in acquisition cost. For example, for five year assets, the present value of depreciating the asset at a 5% real rate of return and a 2% inflation rate is 87 cents for each dollar of cost. Allowing half of the cost to be deducted immediately (with a value of $1) at a 35% tax rate would be the equivalent of a 2.3% reduction in acquisition cost. For seven year property, the most common depreciation class for equipment, the present value is 83 cents for each dollar of investment and the expensing is equivalent to a 3% reduction in cost. Thus the reduction in overall cost of recycling (which also requires labor and material as well as the use of capital) is relatively small due to this provision.

Rationale

The recycling provision was adopted by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343) which included a number of provisions relating to energy conservation. Although no specific rationale was provided, stand alone bills introduced to provide this benefit referred to the energy savings from recycling.

Assessment

In the absence of external effects, it is efficient for investments to face the same effective tax rate. Subsidies to recycling would be justified if recycling reduces external effects such as pollution. Initial concerns about land use that were originally used to justify recycling have now been supplanted largely by benefits for energy use and pollution from recycling. While there was an initial debate about whether recycling was not only cost effective, but whether it actually reduced energy consumption, most studies have indicated that it does. Energy saving is, however, greater for some commodities than others (e.g., aluminum as opposed to glass).

Another justification for subsidies to recycling is that many of the industries that produce virgin materials are eligible for tax subsidies as well (paper and mining), although an alternative policy would be to reduce those existing subsidies rather than grant new ones for recycling. Certain industries (e.g., aluminum) also benefit from inexpensive hydroelectric power.

If a subsidy is justified, it is not clear that a tax subsidy is the best alternative. Recycling issues are largely in the domain of local governments, and the cost effectiveness depends on many other factors (such as density). Local governments have alternative methods, such as requiring recycling and, in some cases, imposing taxes on trash by quantity (although the evidence does not suggest the latter approach is very successful). At the same time, some of the pollution effects of using energy are national (or even global). Providing a federal subsidy to lower costs might induce more localities to be involved in recycling. The subsidies should result in a greater demand and higher price for scrap. However, for communities already involved in recycling, these benefits would appear in lower costs for trash collection overall, with no specific incentive for recycling.

Selected Bibliography

Clement, Douglas. "Recycling: Righteous or Rubbish." *Fedgazette*. Federal Reserve Bank of Minneapolis, March 1, 2005.

Fullerton, Don and Thomas C. Kinaman. "Household Responses to Pricing Garbage by the Bag," *American Economic Review,* Vol. 86, September 1996, pp. 971-984.

Hutchinson, Alex, "Is Recycling Worth It?" *Popular Mechanics,* December 1, 2008.

National Recycling Coalition, Inc. *U.S. Recycling Economic Information Study,* July 2001.
[http://www.epa.gov/osw/conserve/rrr/rmd/rei-rw/pdf/n_report.pdf]

"The Truth About Recycling," *The Economist*, June 9, 2007.

EXPENSING OF MULTIPERIOD TIMBER-GROWING COSTS; AMORTIZATION AND EXPENSING OF REFORESTATION EXPENSES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.2	0.2
2009	([1])	0.2	0.2
2010	([1])	0.2	0.2
2011	([1])	0.2	0.2
2012	([1])	0.2	0.2

([1]) Less than $50 million.

Authorization

Sections 194, 263A(c)(5).

Description

Taxpayers may deduct up to $10,000 of reforestation expenditures incurred with respect to each qualified timber property in any tax year. Expenditures exceeding the cap may be amortized over 84 months. In most other industries, such indirect costs are capitalized under the uniform capitalization rules.

Most of the production costs of maintaining a timber stand after it is established are expensed (deducted when incurred), rather than capitalized (reducing gain when the timber is sold). These costs include indirect carrying costs, such as interest and property taxes, as well as costs of disease and pest control and brush clearing.

Impact

By allowing the deduction of expenses when incurred, the effective tax rate on investments in these indirect costs is zero. These provisions lower the effective tax rate on timber growing in general. The extent of the effect of tax provisions on the timber industry is in some dispute. Most of the benefit goes to corporations, and thus is likely to benefit higher-income individuals (see discussion in *Introduction*).

Rationale

The original ability to expense indirect costs of timber growing was apparently part of a general perception that these costs were maintenance costs, and thus deductible as ordinary costs of a trade or business. There were a series of revenue rulings and court cases over the years distinguishing between what expenses might be deductible and what expenses might be capitalized (for example, I. T. 1610 in 1923 (an income tax unit ruling), Mim. 6030 in 1946 (a mimeographed letter ruling), Revenue Ruling 55-412 in 1955, and Revenue Ruling 66-18 in 1966).

The Tax Reform Act of 1986 included uniform capitalization rules which required indirect expenses of this nature to be capitalized in most cases. Several exceptions were provided, including timber. There is no specific reason given for exempting timber per se, but the general reason given for exceptions to the uniform capitalization rules is that they are cases where application "might be unduly burdensome."

The expensing of the first $10,000 of reforestation costs was added in American Jobs Creation Act of 2004 (P.L. 108-357) and clarified in Gulf Opportunity Zone Act of 2005 (P.L. 109-135). The provision replaced an existing reforestation credit (Code Sec. 48). The change was made to simplify the treatment of reforestation costs, and the basic purpose of the incentive was to encourage reforestation. The act also included timber growing in the manufacturing activities eligible for the new manufacturing deduction under Sec. 199 of the Code.

Assessment

The tax benefit provides a forgiveness of tax on the return to part of the investment in timber growing. While tax subsidy often leads to misallocation of resources and a welfare loss, this provision might be different. Timber growing might provide benefits to society in general (called externalities in economics), such as improved environment, recreational opportunities, or aesthetics. In general, private investors cannot capture most of these benefits, therefore they would tend to invest less than may be socially desirable in reforestation and timber growing. A tax subsidy

may help alleviate this problem. Still, some argue that the tax benefit design makes it a rather weak incentive. In addition, the tax approach must be weighed against other alternatives, such as direct subsidies or direct ownership of timber lands by the government.

Selected Bibliography

Society of American Foresters, Study Group on Forest Taxation. "Forest Taxation." *Journal of Forestry*, v. 78. July 1980, pp. 1-7.

U.S. Congress, Joint Economic Committee. "The Federal Tax Subsidy of the Timber Industry," by Emil Sunley, in *The Economics of Federal Subsidy Programs*. 92nd Congress, 2nd session. July 15, 1972.

— , Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986*. May 4, 1987, pp. 508-509.

U.S. Department of Agriculture, Forest Service. *A Forest Owner's Guide to the Federal Income Tax*, Agriculture Handbook No. 708. Washington, DC: U.S. Government Printing Office, October 1995.

U.S. Department of Treasury. *Special Expensing and Amortization Rules* in *Tax Reform for Fairness, Simplicity, and Economic Growth*, v. 2, Nov. 1984, pp. 299-313.

U.S. General Accounting Office. *Selected Tax Provisions Affecting the Hard Minerals Mining and Timber Industries*, Fact Sheet for the Honorable John Melcher, United States Senate. June 1987.

— . *Forest Service: Timber Harvesting, Planting, Assistance Programs and Tax Provisions*, Briefing Report to the Honorable Sander M. Levin, House of Representatives. April 1990.

U.S. Congress, House of Representatives, *Conference report 108-755 to accompany H.R. 4520, American Jobs Creation Act of 2004,* 108th Congress, 2d Session, October 7, 2004.

TAX EXCLUSION FOR EARNINGS OF CERTAIN ENVIRONMENTAL SETTLEMENT FUNDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	[1]	[1]
2009	—	[1]	[1]
2010	—	[1]	[1]
2011	—	[1]	[1]
2012	—	[1]	[1]

[1] Less than $50 million in positive tax expenditures.

Authorization

Section 468B.

Description

In general, what is known as a designated settlement fund is treated as a separate entity for federal tax purposes, and its modified income is taxed at the maximum trust rate of 35 percent. Modified income in this case refers to gross income less deductions for administrative costs and other expenses incurred in the management of the settlement fund. To qualify as a designated settlement fund, a fund has to satisfy the following conditions: 1) it was established through a court order; 2) it absolves a taxpayer who makes payments to the fund under a court order of liability for personal injury, death, or property damage; 3) it is administered by individuals, a majority of whom are "independent" of the taxpayer; and 4) the taxpayer (or a related party) making payments to the fund has no "beneficial interest" in the income of the fund. While the taxpayers making payments to a designated settlement fund may deduct the payments in the tax year when

they are made, they are liable for any taxes owed on income earned by the fund.

The cleanup of hazardous waste sites under the Superfund program sometimes is paid for out of environmental settlement funds, which serve the same purpose as escrow accounts. These funds arise out of consent decrees involving the Environmental Protection Agency (EPA) and parties held responsible for the site contamination and issued by federal district courts. The EPA uses the funds in the accounts to resolve claims against responsible parties under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

Section 468B treats the money in escrow accounts established to resolve claims under CERCLA as "beneficially owned" by the federal government. As a result, their earnings are excluded from taxation. To qualify for this exclusion, a settlement fund must owe its existence to an order issued by a federal district court, have as its primary purpose the collection of payments to settle claims under CERCLA, grant exclusive control over the money in the fund to a government agency (in this case the EPA), and allow all remaining funds to be disbursed to that agency upon the termination of the fund. The provision applies to accounts established between May 18, 2006 and December 31, 2010.

Impact

The tax expenditure tied to the provision lies in the fund income that escapes taxation. In effect, the provision lowers the after-tax cost to a taxpayer of reaching a settlement with the EPA over cleaning up hazardous waste sites identified through the Superfund program.

Rationale

The provision entered the tax code through the Tax Increase Prevention and Reconciliation Act of 2005. Proponents said it was needed to clarify the tax status of income earned by an environmental escrow account and to give parties deemed responsible for hazardous waste sites an incentive to enter promptly into an agreement with the EPA over cleaning up those sites. The funds in such an account are used to pay for the cost of cleanup operations.

Assessment

Many would agree that it is in the public interest for the parties responsible for hazardous waste sites to act as quickly as possible to clean up the sites at their own expense. The provision is intended to promote such a result.

Yet it is unclear from what little information about the provision is available to what extent it has aided or expedited the cleanup of Superfund hazardous waste sites. Responsible parties end up paying for the cleanup of most of these sites. The EPA has reported that so-called potentially responsible parties have conducted the cleanup of 70 percent of the worst sites, those listed in the EPA's National Priorities List (NPL). For the remaining 30 percent of NPL sites, the EPA cannot locate the responsible parties, or those it has found lack the funds to share the cost of the cleanup. In those cases, the EPA draws on funds in the Superfund trust fund to pay for the cleanup. The provision may remove a barrier to increasing the proportion of contaminated sites cleaned up by responsible parties. If this proportion were to rise, less federal money would be needed to do the cleanup.

Selected Bibliography

Forst, David L., Charles E. Hodges II, Edward M. Manigault, David J. Kautter, and Belinda F Eichell. "Escrows Set Up by Products-Liability Defendant Were Qualified Settlement Funds." *Journal of Taxation*, vol. 105, no. 2, August 2006. Pp. 120-123.

Reisch, Mark and Jonathan L. Ramseur. *Superfund: Implementation and Selected Issues*. Congressional Research Service Report RL33426. Washington, DC: November 26, 2007.

U.S. Congress. Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in the 109th Congress*. Joint committee print JCS-1-07. Washington, DC: 2007, pp. 269-270.

— , U.S. Government Accountability Office. *Superfund: Funding and Reported Costs of Enforcement and Administration*. GAO-08-841R. Washington, DC: July 18, 2008.

Wood, Robert W. "Rulings Makes Qualified Settlement funds More Attractive." *Tax Notes*, May 8, 2006, pp. 673-677.

SPECIAL TAX RATE FOR QUALIFIED TIMBER GAINS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	([1])	([1])
2009	—	0.1	0.1
2010	—	([1])	([1])
2011	—	([1])	([1])
2012	—	([1])	([1])

Authorization

Section 1201(b)

Description

Corporations are taxed on the net gains realized from the sale of capital assets as ordinary income. In contrast, gains from the sale of qualified timber is taxed at a reduced rate of 15 percent.

A qualified timber gain, is the net gain from the sale or exchange of certain timber that has been held for more than 15 years. This provision is effective for one year beginning on the date of enactment the of Food, Conservation, and Energy Act of 2008 (P.L. 110-246), June 18, 2008.

Impact

The special tax rate on qualified timber gains reduces the tax rate on specific timber sales by corporations to levels similar to those faced by Real Estate Investment Trusts (REITs) that have similar timber sales. All else equal, this should reduce the incentive for integrated timber companies to reduce the scope of their operations in order to reorganize to the REIT business form.

Rationale

The Food, Conservation, and Energy Act of 2008 (P.L. 110-246) enacted the temporary special tax rate for qualified timber gains in order to equalize the tax treatment of timber sales across different business structures. This addressed the perceived inequity of intergated timber companies, operating as C-corporations, facing a higher tax rate than Timber REITs on similar activity. As a result of the Act, timber businesses organized as REITs and C-Corporations face similar tax treatment on qualified timber gains.

Assessment

The application of the economic concept of horizontal equity, by equalizing tax treatment across organization forms, could reduce the influence of taxes on organizational form decisions. However, given the temporary nature of the rate reductions and the presence of non-tax factors that influence organizational form decisions, the efficiency gains, if any, are likely small.

Selected Bibliography

PricewatershouseCoopers, "Taxes in Competing Nations: Their Effects on Investment in Paper Manufacturing and Timber Production, PricewaterhouseCoopers," prepared for the American Forest and Paper Association, 2005.

Statement of the American Forest and Paper Association, U.S. Congress, House Committee on Ways and Means, Subcommittee on Select Revenue Measures, *Hearing on Corporate Tax Reform*, 109th Cong., 1st sess., May 9, 2006 (Washington: GPO, 2006).

U.S. Congress, Senate Committee on Finance, Office of the Chairman, "Farm Bill's Disaster Aid, Reforms & Tax Relief Become Law as Senate Overrides Veto," press release, May 22, 2008.

EXCESS OF PERCENTAGE OVER COST DEPLETION: NONFUEL MINERALS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	0.1	0.2
2009	0.1	0.1	0.2
2010	0.1	0.1	0.2
2011	0.1	0.1	0.2
2012	0.1	0.1	0.2

Authorization

Sections 611, 612, 613, and 291.

Description

Firms that extract minerals, ores, and metals from mines are permitted a deduction to recover their capital investment, which depreciates due to the physical and economic depletion of the reserve as the mineral is recovered (section 611).

There are two methods of calculating this deduction: cost depletion, and percentage depletion. Cost depletion allows for the recovery of the actual capital investment — the costs of discovering, purchasing, and developing a mineral reserve — over the period during which the reserve produces income. Each year, the taxpayer deducts a portion of the adjusted basis (original capital investment less previous deductions) equal to the fraction of the estimated remaining recoverable reserves that have been extracted and sold. Under this method, the total deductions cannot exceed the original capital investment.

Under percentage depletion, the deduction for recovery of capital investment is a fixed percentage of the "gross income" — *i.e.*, sales revenue — from the sale of the mineral. Under this method, total deductions typically exceed the capital invested.

Section 613 states that mineral producers must claim the higher of cost or percentage depletion. The percentage depletion allowance is available for many types of minerals, at rates ranging from 5 percent (for clay, sand, gravel, stone, etc.) to 22 percent (for sulphur, uranium, asbestos, lead, etc.).

Metal mines generally qualify for a 14 percent depletion, except for gold, silver, copper, and iron ore, which qualify for a 15 percent depletion. The percentage depletion rate for foreign mines is generally 14 percent.

Percentage depletion is limited to 50 percent of the taxable income from the property. For corporate taxpayers, section 291 reduces the percentage depletion allowance for iron ore by 20 percent. Allowances in excess of cost basis are treated as a preference item and taxed under the alternative minimum tax.

Impact

Historically, generous depletion allowances and other tax benefits reduced effective tax rates in the minerals industries significantly below tax rates on other industries, providing incentives to increase investment, exploration, and output, especially for oil and gas. It is possible for cumulative depletion allowances to total many times the amount of the original investment. The combination of this subsidy and the deduction of exploration and development expenses represents a significant boon to mineral producers that are eligible for both. In addition, the Mining Law of 1872 permits U.S. citizens and businesses to freely prospect for hard rock minerals on federal lands, and allows them to mine the land if an economically recoverable deposit is found. No federal rents or royalties are imposed upon the sale of the extracted minerals. A prospecting entity may establish a claim to an area that it believes may contain a mineral deposit of value and preserve its right to that claim by paying an annual holding fee of $100 per claim. Once a claimed mineral deposit is determined to be economically recoverable, and at least $500 of development work has been performed, the claim holder may apply for a "patent" to obtain title to the surface and mineral rights. If approved, the claimant can obtain full title to the land for $2.50 or $5.00 per acre.

Issues of principal concern are the extent to which percentage depletion:

(1) decreases the price of qualifying minerals, and therefore encourages their consumption;

(2) bids up the price of exploration and mining rights; and

(3) encourages the development of new deposits and increases production.

Most analyses of percentage depletion have focused on the oil and gas industry, which — before the 1975 repeal of percentage depletion for major oil companies — accounted for the bulk of percentage depletion. There has been relatively little analysis of the effect of percentage depletion on other industries. The relative value of the percentage depletion allowance in reducing the effective tax rate of mineral producers is dependent on a number of factors, including the statutory percentage depletion rate, income tax rates, and the effect of the net income limitation.

Rationale

Provisions for a depletion allowance based on the value of the mine were made under a 1912 Treasury Department regulation (T.D. 1742), but this was never effectuated.

A court case resulted in the enactment, as part of the Tariff Act of 1913, of a "reasonable allowance for depletion" not to exceed five percent of the value of output. This statute did not limit total deductions; Treasury regulation No. 33 limited total deductions to the original capital investment.

This system was in effect from 1913 to 1918, although in the Revenue Act of 1916, depletion was restricted to no more than the total value of output, and, in the aggregate, to no more than capital originally invested or fair market value on March 1, 1913 (the latter so that appreciation occurring before enactment of income taxes would not be taxed).

On the grounds that the newer mineral discoveries that contributed to the war effort were treated less favorably, discovery value depletion was enacted in 1918. Discovery depletion, which was in effect through 1926, allowed deductions in excess of capital investment because it was based on the market value of the deposit after discovery. In 1921, because of concern with the size of the allowances, discovery depletion was limited to net income; it was further limited to 50 percent of net income in 1924.

For oil and gas, discovery value depletion was replaced in 1926 by the percentage depletion allowance, at the rate of 27.5 percent. This was due to the administrative complexity and arbitrariness, and due to its tendency to establish high discovery values, which tended to overstate depletion deductions.

For other minerals, discovery value depletion continued until 1932, at which time it was replaced by percentage depletion at the following rates: 23 percent for sulphur, 15 percent for metal mines, and 5 percent for coal.

From 1932 to 1950, percentage depletion was extended to most other minerals. In 1950, President Truman recommended a reduction in the top depletion rates to 15 percent, but Congress disagreed. The Revenue Act of 1951 raised the allowance for coal to 10 percent and granted it to more minerals.

In 1954, still more minerals were granted the allowance, and foreign mines were granted a lower rate. In 1969, the top depletion rates were reduced and the allowance was made subject to the minimum tax. The Tax Equity and Fiscal Responsibility Act of 1982 reduced the allowance for corporations that mined coal and iron ore by 15 percent. The Tax Reform Act of 1986 raised the cutback in corporate allowances for coal and iron ore from 15 percent to 20 percent.

Assessment

Standard accounting and economic principles state that the appropriate method of capital recovery in the mineral industry is cost depletion adjusted for inflation. The percentage depletion allowance permits mineral producers to continue to claim a deduction even after all the investment costs of acquiring and developing the property have been recovered. Thus it is a mineral production subsidy rather than an investment subsidy. In cases where a taxpayer has obtained mining rights relatively inexpensively under the provisions of the Mining Law of 1872, it can be argued that such taxpayers should not be entitled to the additional benefits of the percentage depletion provisions.

As a production subsidy, however, percentage depletion is economically inefficient, encouraging excessive development of existing properties rather than exploration of new ones. Although accelerated depreciation for non-mineral assets may lower effective tax rates by speeding up tax benefits, these assets cannot claim depreciation deductions in excess of investment.

However, arguments have been made to justify percentage depletion on grounds of unusual risks, the distortions in the corporate income tax, and national security, and to protect domestic producers. Mineral price volatility alone does not necessarily justify percentage depletion.

Percentage depletion may not be the most efficient way to increase mineral output. Percentage depletion may also have adverse environmental consequences, encouraging the use of raw materials rather than recycled substitutes.

Selected Bibliography

Andrews-Speed, Philip, and Christopher Rogers."Mining Taxation on Issues for the Future," *Resources Policy*, v. 25. 1999, pp. 221-227.

Anderson, Robert D., Alan S. Miller, and Richard D. Spiegelman. "U.S. Federal Tax Policy: The Evolution of Percentage Depletion for Minerals," *Resources Policy*, v. 3. September 1977, pp. 165-176.

Conrad, Robert F. "Mining Taxation: A Numerical Introduction," *National Tax Journal*, v. 33. December, 1980, pp. 443-449.

Crowson, Philip. *Inside Mining: The Economics of the Supply and Demand of Minerals and Metals*. London: Mining Journal Books, 1998.

Davidson, Paul. "The Depletion Allowance Revisited," *Natural Resources Journal*, v. 10. January 1970, pp. 1-9.

Dorsey, Christine. "Clinton Administration Revives Plan to Revoke Mining Tax Break." *Las Vegas Review — Journal.* February 10, 2000. p. 4D.

Fenton, Edmund D. "Tax Reform Act of 1986: Changes in Hard Mineral Taxation," *Oil and Gas Tax Quarterly*, v. 36. September, 1987, pp. 85-98.

Frazier, Jessica and Edmund D. Fenton. "The Interesting Beginnings of the Percentage Depletion Allowance," *Oil and Gas Tax Quarterly*, v. 38. June 1990, pp. 697-712.

Lagos, Gustavo. "Mining Investment and Compensation — Mineral Taxation and Investment." *Natural Resources Forum.* August 1993.v.17.

Lazzari, Salvatore. *The Effects of the Administration's Tax Reform Proposal on the Mining Industry*. Library of Congress, Congressional Research Service Report 85-WP. Washington, DC: July 29, 1985.

_. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL 30406. Washington, DC: June 28, 2005.

— . *The Federal Royalty and Tax Treatment of the Hard Rock Minerals Industry: An Economic Analysis*. Library of Congress, Congressional Research Service. CRS Report RL34268. Washington, DC: June 13, 2008.

Muzondo, Timothy R. "Mineral Taxation, Market failure, and the Environment." *International Monetary Fund. Staff Papers* - International Monetary Fund. March 1993.v.40. Washington, pp. 152-178.

Randall, Gory. "Hard Mineral Taxation-Practical Problems," *Idaho Law Review*, v. 19. Summer 1983, pp. 487-503.

Tripp, John D., Hugh D. Grove, and Michael McGrath. "Maximizing Percentage Depletion in Solid Minerals," *Oil and Gas Tax Quarterly*, v. 30. June 1982, pp. 631-646.

Updegraft, Kenneth E., and Joel D. Zychnick. "Transportation of Crude Mineral Production by Mine Owners and its Effect on Hard Minerals Depletion Allowance," *Tax Lawyer*, v. 35. Winter 1982, pp. 367-387.

U.S. General Accounting Office. *Selected Tax Provisions Affecting the Hard Minerals Mining and Timber Industry*. GAO/GGD-87-77 FS. June 1987. Washington, DC: U.S. Government Printing Office, June 1987.

Ward, Frank A., and Joe Kerkvliet. "Quantifying Exhaustible Resource Theory: An Application to Mineral Taxation Policy." *Resource and Energy Economics.* June 1993.v.15. pp. 203-242.

EXPENSING OF EXPLORATION AND DEVELOPMENT COSTS: NONFUEL MINERALS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	[1]	0.1	0.1
2009	[1]	0.1	0.1
2010	[1]	0.1	0.1
2011	[1]	0.1	0.1
2012	[1]	0.1	0.1

[1] Less than $50 million.

Authorization

Sections 263, 291, 616-617, 56, 1254.

Description

Firms engaged in mining are permitted to expense (to deduct in the year paid or incurred) rather than capitalize (i.e., recover such costs through depletion or depreciation) certain exploration and development (E&D) costs. This provision is an exception to general tax rules.

In general, mining exploration costs are those (non-equipment) costs incurred to ascertain the existence, location, extent, or quality of any potentially commercial deposit of ore or other depletable mineral prior to the development stage of the mine or deposit.

Development costs generally are those incurred for the development of a mine or other natural deposits after the existence of ores in commercially marketable quantities has been determined. Development expenditures generally include those for construction of shafts and tunnels, and in some

cases drilling and testing to obtain additional information for planning operations. There are no limits on the current deductibility of such costs. Expensing of mine E&D costs may be taken in addition to percentage depletion, but it subsequently reduces percentage depletion deductions (*i.e.*, is recaptured). The costs of tangible equipment must be depreciated.

Expensing of E&D costs applies only to domestic properties; E&D costs on foreign properties must be depreciated. The excess of expensing over the capitalized value (amortized over 10 years) is a tax preference item that is subject to the alternative minimum tax.

Impact

E&D costs for non-fuel minerals are not as large a portion of the costs of finding and developing a mineral reserve as is the case for oil and gas, where they typically account for over two-thirds of the costs of creating a mineral asset. Expensing of such costs is also less of a benefit than percentage depletion allowances. The Joint Committee on Taxation estimates total tax expenditures from expensing E&D costs at $500 million over the period 2006-2010.

Nevertheless they are a capital expense which otherwise would be depleted over the income-producing life of the mineral reserve. Combined with other tax subsidies, such as percentage depletion, expensing reduces effective tax rates in the mineral industry below tax rates on other industries, thereby providing incentives to increase investment, exploration, and output. This cost reduction increases the supply of the mineral and reduces its price.

This tax expenditure is largely claimed by corporate producers. The at-risk, recapture, and minimum tax restrictions that have since been placed on the use of the provision have primarily limited the ability of high-income taxpayers to shelter their income from taxation through investment in mineral exploration.

Rationale

Expensing of mine development expenditures was enacted in 1951 to encourage mining and reduce ambiguity in its tax treatment. The provision for mine exploration was added in 1966.

Prior to the Tax Reform Act of 1969, a taxpayer could elect either to deduct without dollar limitation exploration expenditures in the United States (which subsequently reduced percentage depletion benefits), or to deduct up to $100,000 a year with a total not to exceed $400,000 of foreign and domestic exploration expenditures without recapture.

The 1969 act subjected all post-1969 exploration expenditures to recapture. The Tax Equity and Fiscal Responsibility Act of 1982 added mineral exploration and development costs as tax preference items subject to the alternative minimum tax, and limited expensing for corporations to 85 percent. The Tax Reform Act of 1986 required that all exploration and development expenditures on foreign properties be capitalized.

Assessment

E&D costs are generally recognized to be capital costs, which, according to standard accounting and economic principles, should be recovered through depletion (cost depletion adjusted for inflation).

Lease bonuses and other exploratory costs (survey costs, geological and geophysical costs) are properly treated as capital costs, although they may be recovered through percentage rather than cost depletion. Immediate expensing of E&D costs provides a tax subsidy for capital invested in the mineral industry with a relatively large subsidy for corporate producers.

By expensing rather than capitalizing these costs, the tax code effectively sets taxes on the return to such expenditures at zero. As a capital subsidy, however, expensing is inefficient because it makes investment decisions based on tax considerations rather than inherent economic considerations.

Arguments have been made over the years to justify expensing on the basis of unusual investment risks, the distortions in the corporate income tax, strategic materials and national security, and protection of domestic producers (especially small independents).

Expensing is a costly and inefficient way to increase mineral output and enhance energy security. Expensing may also have adverse environmental consequences by encouraging the development of raw materials as opposed to recycled substitutes.

Selected Bibliography

Andrews-Speed, Philip, and Christopher Rogers. "Mining Taxation Issues for the Future," *Resources Policy*, v. 25 (1999), pp. 221-227.

Congressional Budget Office. Budget Options. Section 28: *Repeal the Expensing of Exploration and Development Costs for Extractive Industries*. February 2005.

Conrad, Robert F. "Mining Taxation: A Numerical Introduction." *National Tax Journal*, v. 33, December, 1980, pp. 443-449.

Crowson, Philip. *Inside Mining: The Economics of the Supply and Demand of Minerals and Metals*. London: Mining Journal Books, 1998.

Dorsey, Christine. "Clinton Administration Revives Plan to Revoke Mining Tax Break." *Las Vegas Review—Journal.* February 10, 2000. p. 4D.

Lagos, Gustavo. "Mining Investment and Compensation — Mineral Taxation and Investment." *Natural Resources Forum.* August 1993. v.17.

Lazzari, Salvatore. *Energy Tax Policy: An Economic Analysis*. Library of Congress, Congressional Research Service Report RL30406. Washington, DC: June 28, 2006.

— . *The Federal Royalty and Tax Treatment of the Hard Rock Minerals Industry: An Economic Analysis*. Library of Congress, Congressional Research Service. CRS Report RL34268. Washington, DC: June 13, 2008.

Muzondo, Timothy R. "Mineral Taxation, Market Failure, and the Environment." *International Monetary Fund. Staff Papers.* International Monetary Fund. March 1993.v.40. Washington, pp. 152-178.

U.S. General Accounting Office. *Selected Tax Provisions Affecting the Hard Minerals Mining and Timber Industry*. GAO/GGD-87-77 FS, Washington, D.C., Government Printing Office, June 1987.

U.S. General Accounting Office. *Selected Tax Provisions Affecting the Hard Minerals Mining and Timber Industry*. GAO/GGD-87-77 FS. June 1987. Washington, DC: U.S. Government Printing Office, June 1987.

Ward, Frank A., and Joe Kerkvliet. "Quantifying Exhaustible Resource Theory: An Application to Mineral Taxation Policy." *Resource and Energy Economics.* June 1993.v.15. pp. 203-242.

Wilburn, D.R. "Exploration." *Mining Engineering.* May 2003. v.55. pp. 30-43.

TREATMENT OF INCOME FROM EXPLORATION AND MINING OF NATURAL RESOURCES AS QUALIFYING INCOME UNDER THE PUBLICLY TRADED PARTNERSHIP RULES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	—	([1])
2009	([1])	—	([1])
2010	([1])	—	([1])
2011	([1])	—	([1])
2012	([1])	—	([1])

([1]) Positive tax expenditure of less than $50 million

Authorization

Section 7704

Description

Code Sec. 7704, with a noteworthy exception, generally treats a publicly traded partnership (PTP) as a corporation for federal income tax purposes. For this purpose, a PTP is any partnership that is traded on an established securities market or secondary market.

A notable exception to Sec. 7704 occurs if 90 percent of the gross income of a PTP is passive-type income, such as interest, dividends, real property rents, gains from the disposition of real property, and similar income or gains. In these cases, the PTP is exempt from corporate level taxation, thus allowing it to claim pass-through status for tax purposes.

Qualifying income includes interest, dividends, real property rents, gain from the disposition of real property, income and gains from certain natural resource activities, gain from the disposition of a capital asset (e.g., selling stock), or certain property held for the production of income, as well as

certain income and gains from commodities. In addition, income derived from the exploration, development, mining or production, processing, refining, transportation, or the marketing of any mineral or natural resource are treated as qualifying income for publicly traded partnerships. Qualifying income does not include income derived from the production of power, or trading and investment activity.

Impact

In general, the publicly traded partnerships rules favor the owners of publicly traded partnerships whose main source of qualifying income is derived from the exploration, development, mining or production, processing, refining, transportation, or the marketing of any mineral or natural resource. In contrast to an otherwise similar corporation, the owners of such a publicly traded partnership are not subject to a corporate level tax. In addition, the owners of PTPs benefit from deferral of income distributed by the PTP.

Rationale

The rules generally treating publicly traded partnerships as corporations were enacted by the Revenue Act of 1987 (P.L. 100-203) to address concern about erosion of the corporate tax base through the use of partnerships. Congress's concern was that growth in PTPs signified that activities that would otherwise be conducted by corporations, and subject to both corporate and shareholder level taxation, were being done by PTPs for purely tax reasons — eroding the corporate tax base.

The Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647) clarified the definition of qualified income to include income from the transport of oil and gas and from depletable natural resources. Income from the marketing of oil and gas to retail customers was excluded from qualified income. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) expands the definition of qualified income to include income or gains derived from the exploration, development, mining or production, processing, refining, transportation (including pipelines transporting gas, oil, or products thereof), or the marketing of any mineral or natural resource.

Assessment

The fundamental issue, from a matter of tax policy, is whether some PTPs should be exempt from corporate level taxation, based upon the nature and type of their income. In general, Congress has enacted rules that limit the ability of untaxed entities to publicly trade their interests and/or restrict the entities activities. Thus, the exemption of some PTPs from corporate level

taxes may be seen as a departure from general Congressional intent concerning passthrough entities. Others would argue that the types of qualifying income listed in statute are sufficient justification for the passthrough treatment.

Selected Bibliography

Gentry, William M., "Taxes, Financial Decisions and Organizational Form: Evidence from Publicly Traded Partnerships," *Journal of Public Economics,* vol. 53, no. 2, (1994), pp.223-244.

Martin, John D., and John W. Kensinger, "Valuation Effects of Rollout Publicly Traded Partnerships in the Oil and Gas Industry," *Managerial and Decision Economics*, vol. 11, no. 3, (1990), pp. 143-153.

Schisler, Dan L. and James M. Lukawitz. "The Impact of the Omnibus Budget Reconciliation Act of 1987 on Shareholders of Publicly Traded Partnerships," *Advances in Taxation,* vol. 7, (1995), pp.141-159.

U.S. Congress, Joint Committee on Taxation**.** *Present Law and Analysis Relating to Tax Treatment of Partnership Carried Interest and Related Issues, Part I.* JCX-62-07, 110th Congress, 1st Session. (Washington, D.C., GPO, 2007), p. 40.

U.S. Congress, House Committee on the Budget, *Omnibus Budget Reconciliation Act of 1987*, 100th Cong., 1st sess., October 26, 1987 (Washington, GPO, 1987).

SPECIAL RULES FOR MINING RECLAMATION RESERVES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1]) Less than $50 million.

Authorization

Section 468.

Description

Firms are generally not allowed to deduct a future expense until "economic performance" occurs — that is, until the service they pay for is performed and the expense is actually paid. Electing taxpayers may, however, deduct the current-value equivalent of certain estimated future reclamation and closing costs for mining and solid waste disposal sites.

For Federal income tax purposes, the amounts deducted prior to economic performance are deemed to earn interest at a specified interest rate. When the reclamation has been completed, any excess of the amounts deducted plus deemed accrued interest over the actual reclamation or closing costs is taxed as ordinary income.

Impact

Section 468 permits reclamation and closing costs to be deducted at the time of the mining or waste disposal activity that gives rise to the costs. Absent this provision, the costs would not be deductible until the reclamation or closing actually occurs and the costs are paid. Any excess amount deducted in advance (plus deemed accrued interest) is taxed at the time of reclamation or closing.

Rationale

This provision was adopted in 1984. Proponents argued that allowing current deduction of mine reclamation and similar expenses is necessary to encourage reclamation, and to prevent the adverse economic effect on mining companies that might result from applying the general tax rules regarding deduction of future costs.

Assessment

Reclamation and closing costs for mines and waste disposal sites that are not incurred concurrently with production from the facilities are capital expenditures. Unlike ordinary capital expenditures, however, these outlays are made at the end of an investment project rather than at the beginning.

Despite this difference, writing off these capital costs over the project life is appropriate from an economic perspective, paralleling depreciation of up-front capital costs. The tax code does not provide systematic recognition of such end-of-project capital costs. Hence they are treated under special provisions that provide exceptions to the normal rule of denying deduction until economic performance. Because the provisions align taxable income and economic incomes closer together, it is debatable whether the exceptions should be regarded as tax expenditures at all.

Selected Bibliography

Halperin, Daniel I. Interest in Disguise: Taxing the 'Time Value of Money,' *The Yale Law Journal*. January 1986, pp. 506-552.

Kiefer, Donald W. The Tax Treatment of a 'Reverse Investment,' *Tax Notes*. March 4, 1985, pp. 925-932.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*. Committee Print, 98th Congress, 2nd session, December 31, 1984, pp. 273-276.

Wise, Spence and J. Ralph Byington. Mining and Solid Waste Reclamation and Closing Costs, *Oil, Gas & Energy Quarterly,* vol. 50, pp. 47-55, September 2001.

Agriculture

EXCLUSION OF COST-SHARING PAYMENTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1])Less than $50 million

Authorization

Section 126.

Description

There are a number of programs under which both the Federal and State Governments make payments to taxpayers which represent a share of the cost of certain improvements made to the land. These programs generally relate to improvements which further conservation, protect the environment, improve forests, or provide habitats for wildlife. Under Section 126, the grants received under certain of these programs are excluded from the recipient's gross income.

To qualify for the exclusion, the payment must be made primarily for the purpose of conserving soil and water resources or protecting the environment, and the payment must not produce a substantial increase in the annual income from the property with respect to which the payment was made.

Impact

The exclusion of these grants and payments from tax provides a general incentive for various conservation and land improvement projects that might not otherwise be undertaken.

Rationale

The income tax exclusion for certain cost-sharing payments was part of the tax changes made under the Revenue Act of 1978. The rationale for this change was that in the absence of an exclusion many of these conservation projects would not be undertaken. In addition, since the grants are to be spent by the taxpayer on conservation projects, the taxpayer would not necessarily have the additional funds needed to pay the tax on the grants if they were not excluded from taxable income.

Assessment

The partial exclusion of certain cost-sharing payments is based on the premise that the improvements financed by these grants benefit both the general public and the individual landowner. The portion of the value of the improvement financed by grant payments attributable to public benefit should be excluded from the recipient's gross income while that portion of the value primarily benefitting the landowner (private benefit) is properly taxable to the recipient of the payment.

The problem with this tax treatment is that there is no way to identify the true value of the public benefit. In those cases where the exclusion of cost-sharing payment is insufficient to cover the value of the public benefit, the project probably would not be undertaken.

On the other hand, on those projects that are undertaken, the exclusion of the cost-sharing payment probably exceeds the value of the public benefit and hence, the excess provides a subsidy primarily benefitting the landowner.

Selected Bibliography

U.S. Department of the Treasury, Internal Revenue Service, *Farmer's Tax Guide,* Publication 225, 2007, pp. 11-12.

U.S. Congress. Joint Committee on Taxation. *Study of the Overall State of the Federal Tax System and Recommendations for Simplification, Pursuant to Section 8022(3)(B) of the Internal Revenue Code of 1986, Volume II.* JCS-3-01, April 2001, pp. 460-462.

— , *Present Law and Description of Proposals Relating to Federal Income Tax Provisions That Impact Energy, Fuel, and Land Use Conservation and Preservation.* July 24, 2000.

— , Senate Committee on Finance. *Technical Corrections Act of 1979*, 96th Congress, 1st session. December 13, 1979, pp. 79-81.

— , *General Explanation of the Revenue Act of 1978*

Agriculture

EXCLUSION OF CANCELLATION OF INDEBTEDNESS INCOME OF FARMERS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	-	0.1
2009	0.1	-	0.1
2010	0.1	-	0.1
2011	0.1	-	0.1
2012	0.1	-	0.1

Authorization

Sections 108 and 1017.

Description

This provision allows farmers who are solvent to treat the income arising from the cancellation of certain indebtedness as if they were insolvent taxpayers. Under this provision, income that would normally be subject to tax, the cancellation of a debt, would be excluded from tax if the discharged debt was "qualified farm debt" discharged or canceled by a "qualified person."

To qualify, farm debt must meet two tests: it must be incurred directly from the operation of a farming business, and at least 50 percent of the taxpayer's previous three years of gross receipts must come from farming.

To qualify, those canceling the qualified farm debt must participate regularly in the business of lending money, cannot be related to the taxpayer who is excluding the debt, cannot be a person from whom the taxpayer acquired property securing the debt, or cannot be a person who received any

fees or commissions associated with acquiring the property securing the debt. Qualified persons include Federal, state, and local governments.

The amount of canceled debt that can be excluded from tax cannot exceed the sum of adjusted tax attributes and adjusted basis of qualified property. Any canceled debt that exceeds this amount must be included in gross income. Tax attributes include net operating losses, general business credit carryovers, capital losses, minimum tax credits, passive activity loss and credit carryovers, and foreign tax credit carryovers. Qualified property includes business (depreciable) property and investment (including farmland) property.

Taxpayers can elect to reduce the basis of their property before reducing any other tax benefits.

Impact

This exclusion allows solvent farmers to defer the tax on the income resulting from the cancellation of a debt.

Rationale

The exclusion for the cancellation of qualified farm indebtedness was enacted as part of the Tax Reform Act of 1986. At the time, the intended purpose of the provision was to avoid tax problems that might arise from other legislative initiatives designed to alleviate the credit crisis in the farm sector.

For instance, Congress was concerned that pending legislation providing Federal guarantees for lenders participating in farm-loan write-downs would cause some farmers to recognize large amounts of income when farm loans were canceled. As a result, these farmers might be forced to sell their farmland to pay the taxes on the canceled debt. This tax provision was adopted to mitigate that problem.

Assessment

The exclusion of cancellation of qualified farm income indebtedness does not constitute a forgiveness of tax but rather a deferral of tax. By electing to offset the canceled debt through reductions in the basis of property, a taxpayer can postpone the tax that would have been owed on the canceled debt until the basis reductions are recaptured when the property is sold or through reduced depreciation in the future. Since money has a time value (a dollar today is more valuable than a dollar in the future), however, the

deferral of tax provides a benefit in that it effectively lowers the tax rate on the income realized from the discharge of indebtedness.

Selected Bibliography

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986*.

— , House Committee on the Budget Conference Report. *Omnibus Budget Reconciliation Act of 1993*. Washington, DC, 1993.

U.S. Treasury. Internal Revenue Service. *Farmer's Tax Guide*. Publication 225, 2007.

-, Internal Revenue Service. *Reduction of Tax Attributes Due to Discharge of Indebtedness*. Federal Register, Vol. 69, No. 91 May 11, 2004, pp. 26038-26040.

Agriculture

CASH ACCOUNTING FOR AGRICULTURE

Estimated Revenue Loss*

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.3	(1)	0.3
2009	0.2	(1)	0.2
2010	0.2	(1)	0.2
2011	0.2	(1)	0.2
2012	0.2	(1)	0.2

(1) Less than $50 million.

Disaggregated estimates available from the Joint Committee on Taxation.

Authorization

Sections 162, 175, 180, 446, 447, 448, 461, 464, and 465.

Description

Most farm businesses (with the exception of certain farm corporations and partnerships or any tax shelter operation) may use the cash method of tax accounting to deduct costs attributable to goods held for sale and in inventory at the end of the tax year. These businesses are also allowed to expense some costs of developing assets that will produce income in future years. Both of these rules thus allow deductions to be claimed before the income associated with the deductions is realized.

Costs that may be deducted before income attributable to them is realized include livestock feed and the expenses of planting crops for succeeding year's harvest. Costs that otherwise would be considered capital expenditures but that may be deducted immediately by farmers include

certain soil and water conservation expenses, costs associated with raising dairy and breeding cattle, and fertilizer and soil conditioner costs.

Impact

For income tax purposes, the cash method of accounting is less burdensome than the accrual method of accounting and also provides benefits in that it allows taxes to be deferred into the future. Farmers who use the cash method of accounting and the special expensing provisions receive tax benefits not available to taxpayers required to use the accrual method of accounting.

Rationale

The Revenue Act of 1916 established that a taxpayer may compute personal income for tax purposes using the same accounting methods used to compute income for business purposes. At the time, because accounting methods were less sophisticated and the typical farming operation was small, the regulations were apparently adopted to simplify record keeping for farmers.

Specific regulations relating to soil and water conservation expenditures were adopted in the Internal Revenue Code of 1954. Provisions governing the treatment of fertilizer costs were added in 1960.

The Tax Reform Act of 1976 required that certain farm corporations and some tax shelter operations use the accrual method of accounting rather than cash accounting. The Tax Reform Act of 1986 further limited the use of cash accounting by farm corporations and tax shelters and repealed the expensing rules for certain land clearing operations. The Act also limited the use of cash accounting for assets that had preproductive periods longer than two years. These restrictions, however, were later repealed by the Technical and Miscellaneous Revenue Act of 1988.

Assessment

The effect of deducting costs before the associated income is realized understates income in the year of deduction and overstates income in the year of realization. The net result is that tax liability is deferred which results in an underassessment of tax. In addition, in certain instances when the income is finally taxed, it may be taxed at preferential capital gains rates.

Selected Bibliography

U.S. Department of the Treasury. Internal Revenue Service. *Farmer's Tax Guide*. Publication 225, 2007.

-, Internal Revenue Service. *Accounting Periods and Methods*. Publication 538. 2008.

U.S. Congress, Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in the 107th Congress*. JCS-1-03, January 2003, pp. 240-242.

-, Joint Committee on Taxation. *Overview of Present Law and Selected Proposals Regarding the Federal Income Taxation of Small Business and Agriculture.* JCX-45-02, May 2002, pp. 37-39.

-, Joint Committee on Taxation. *General Explanation of the Revenue Act of 1978*.

U.S. Senate, Committee on Finance. *Technical Corrections Act of 1979*. 96th Congress, 1st session, December 13, 1979, pp. 79-81.

U.S. Congress. Congressional Budget Office. *Budget Options*. February 2001, p. 439.

Agriculture

INCOME AVERAGING FOR FARMERS AND FISHERMEN

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	-	([1])
2009	([1])	-	([1])
2010	([1])	-	([1])
2011	([1])	-	([1])
2012	([1])	-	([1])

([1])Less than $50 million.

Authorization

Section 1301.

Description

For taxable years beginning after December 31, 1997, taxpayers have the option to calculate their current year income tax by averaging over the prior 3-year period, all or a portion of their income from farming or commercial fishing. The taxpayer can designate all or a part of his current year income from farming as "elected farm income" or from fishing as "fishing business" income. The taxpayer then allocates 1/3 of the "elected farm income" or "fishing business" income to each of the prior 3 taxable years.

The current year income tax for a taxpayer making this election is calculated by taking the sum of his current year tax calculated without including the "elected farm income" or "elected fishing business" income and the extra tax in each of the three previous years that results from including 1/3 of the current year's "elected farm income" or "fishing business" income. "Elected farm income" can include the gain on the sale of farm assets with the exception of the gain on the sale of land.

The tax computed using income averaging for farmers and fisherman does not apply for purposes of computing the regular income tax and subsequent determination of alternative minimum tax liability.

Impact

This provision provides tax relief primarily to taxpayers whose main source of income derives from agricultural production or commercial fishing. It allows these taxpayers to exert some control over their taxable incomes and hence, their tax liabilities in those years that they experience fluctuations in their incomes.

Rationale

Income averaging for farmers was enacted as part of the Taxpayer Relief Act of 1997. Congress saw that the income from farming can fluctuate dramatically from year to year and that these fluctuations are outside the control of the taxpayers. To address this problem, Congress voted that taxpayers who derive their income from agriculture should be allowed an election to average farm income and mitigate the adverse tax consequences of fluctuating incomes under a progressive tax structure.

Assessment

Under an income tax system with progressive tax rates and an annual assessment of tax, the total tax assessment on an income that fluctuates from year to year will be greater than the tax levied on an equal amount of income that is received in equal annual installments. Under pre-1986 income tax law, income averaging provisions were designed to help avoid the over-assessment of tax that might occur under a progressive tax when a taxpayer's income fluctuated from year to year. These pre-1986 tax provisions were especially popular with farmers who, due to market or weather conditions, might experience significant fluctuations in their annual incomes.

The Tax Reform Act of 1986 repealed income averaging. At the time, it was argued that the reduction in the number of tax brackets and the level of marginal tax rates reduced the need for income averaging. Farmers argued that even though the tax brackets had been widened and tax rates reduced, the fluctuations in their incomes could be so dramatic that without averaging they would be subject to an inappropriately high level of income taxation.

As marginal income tax rates were increased in 1990 and 1993, Congress became more receptive to the arguments for income averaging and reinstated limited averaging in the Taxpayer Relief Act of 1997. Under this Act,

income averaging for farmers was a temporary provision and was to expire after January 1, 2001. The Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1998 made income averaging for farmers permanent.

The American Jobs Creation Act of 2004 expanded income averaging to include commercial fisherman. It also coordinated income averaging with the individual alternative minimum tax so that the use of income averaging would not cause farmers or fishermen to incur alternative minimum tax liability.

It appears, however, that the current income averaging provisions fall short of the economic ideal on several fronts. For instance, from an economic perspective the source of income fluctuations should not matter when deciding whether or not income averaging is needed. Hence, limiting averaging to farm income or commercial fishing income may appear unfair to other taxpayers such as artists and writers who also may have significant fluctuations in their annual incomes.

A more significant theoretical problem is that these provisions only allow for upward income averaging. Under a theoretically correct income tax, income averaging would be available for downward fluctuations in income as well as upward fluctuations. Downward income averaging would mean that taxpayers who experienced major reductions in their annual incomes would also qualify for income averaging. This would allow them to mitigate sharp reductions in their current year incomes by reducing their current year taxes to reflect taxes that had already been prepaid in previous years when their incomes were higher.

Selected Bibliography

U.S. Congress, House of Representatives. American Jobs Creation Act of 2004. Conference Report to Accompany H.R. 4520. H. Rept. 108-755. October 2004.

— ,Joint Committee on Taxation. *Overview of Present Law and Selected Proposals Regarding the Federal Income Taxation of Small Business and Agriculture.* JCX-45-02, May 2002, pp. 44-45.

— , Joint Committee on Taxation. *Technical Explanation of S.3152, "Community Renewal and New Markets Act of 2000."* JCX-105-00, October 2000, p. 54.

— , Joint Committee on Taxation. *Conference Report on Tax and Trade Provisions of the Omnibus Consolidated and Emergency Supplemental Appropriations Act*. (H.R. 4328). October 1998.

— , Joint Committee on Taxation. *Taxpayer Relief Act of* 1998. September 1998.

— , Joint Committee on Taxation. *Taxpayer Relief Act of 1997.* July 1997.

— , Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986.* May 1987.

U.S. Department of the Treasury. Internal Revenue Service. *IRS Final Regulations (T.D. 8972) on Averaging of Farm Income.* January 8, 2002.

— , Internal Revenue Service. *Farmer's Tax Guide*. Publication 225. 2007.

Agriculture

FIVE-YEAR CARRYBACK PERIOD FOR NET OPERATING LOSSES ATTRIBUTABLE TO FARMING

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	0.1	0.1	0.2
2010	0.1	0.1	0.2
2011	0.1	0.1	0.2
2012	0.1	0.1	0.2

([1])Less than $50 million.

Authorization

Section 172.

Description

A net operating loss, the amount by which business and certain other expenses exceed income for the year, may be carried forward and deducted from other income for 20 years following the loss year. It may, at the taxpayer's election, instead be carried back to earlier years in which there was positive income. For most taxpayers, the carryback period is limited to the previous two years, although small businesses in federally declared disaster areas may carry losses back three years. (The Job Creation and Workers Assistance Act of 2002 temporarily extended the net operating loss carryback period to five years for losses arising in taxable years ending in 2001 and 2002 for businesses that normally have a two or three year loss carryback.) Current law permits losses attributed to a farming business (as defined in section 263A(e)(4)) to be carried back five years. The Gulf Opportunity Zone Act of 2005 broadened the definition of farm income to

include losses on qualified timber property located in the Gulf or Rita Opportunity Zones.

Impact

For businesses that have paid taxes within the allowed carryback period, making use of the carryback rather than the carryforward option for operating losses means receiving an immediate refund rather than waiting for a future tax reduction. Although the special five year carryback applies only to losses incurred in a farming business, the losses may be used to offset taxes paid on any type of income. Thus the beneficiaries of this provision are farmers who have either been profitable in the past or who have had non-farm income on which they paid taxes.

Rationale

Some provision for deducting net operation losses from income in other years has been an integral part of the income tax system from its inception. The current general rules (20-year carryforwards and two year carrybacks) date from the "Taxpayer Relief Act of 1997," P.L. 105-34, which shortened the carryback period from three to two years (except for farmers and small businessmen in federally declared disaster areas, which remained at three years).

The five year carryback for farm losses was enacted as a part of the "Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1999," P.L. 105-277. The committee reports state that a special provision for farmers was considered appropriate because of the exceptional volatility of farm income.

The Gulf Opportunity Zone Act of 2005 broadened the definition of farm income to include losses on qualified timber property located in the Gulf or Rita Opportunity Zones. This change is effective for losses incurred on or after August 28, 2005 (in the Gulf Opportunity Zone), on or after September 23, 2005 (in the Rita Zone), on or after October 23, 2005 (in the Wilma Zone) and before January 1, 2007.

Assessment

In an ideal income tax system, the government would refund taxes in loss years with the same alacrity that it collects them in profit years, and a carryback of losses would not be considered a deviation from the normal tax structure. Since the current system is less than ideal in many ways, however, it is difficult to say whether the loss carryover rules bring it closer to or move it further away from the ideal.

The special rule for farmers is intended to compensate for the excessive fluctuations in income farmers are said to experience. This justification is offered for many of the tax benefits farmers are allowed, but it is not actually based on evidence that farmers experience annual income fluctuations greater than other small businessmen. The farm losses may offset taxes on non-farm income, so some of the benefit will accrue to persons whose income is not primarily from farming.

Selected Bibliography

U.S. Treasury Department. Internal Revenue Service. *Net Operating Losses (NOLs) for Individuals, Estates, and Trusts*. Publication 536. 2007.

U.S. Congress, Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in 1998*, pp. 276-277.

— , Joint Committee on Taxation. *Summary of P. L. 107-147, The "Job Creation and Worker Assistance Act of 2002"*, JCX-22-02, March 2002, p. 2.

— , Joint Committee on Taxation. *Technical Explanation of the Revenue Provisions of H.R. 4440, "The Gulf Opportunity Zone Act of 2005" As Passed By The House of Representatives and the Senate*. JCX-88-05, December 16, 2005, p. 22.

U.S. House, Committee on Ways and Means. *Taxpayer Relief Act of 1998*. 105th Congress, 2nd session, September 23, 1998, pp. 57-59.

EXEMPTION OF CREDIT UNION INCOME

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	1.4	1.4
2009	-	1.5	1.5
2010	-	1.6	1.6
2011	-	1.7	1.7
2012	-	1.8	1.8

Authorization

Section 501(c)(14) of the Internal Revenue Code of 1986 and section 122 of the Federal Credit Union Act, as amended (12 U.S.C. sec. 1768).

Description

Credit unions without capital stock, organized and operated for mutual purposes, and without profit are not subject to Federal income tax.

Impact

Credit unions are the only depository institutions exempt from Federal income taxes. If this exemption were repealed, both federally chartered and State chartered credit unions would become liable for payment of Federal corporate income taxes on their retained earnings but not on earnings distributed to depositors.

For a given addition to retained earnings, this tax exemption permits credit unions to pay members higher dividends and charge members lower interest rates on loans. Over the past 25 years, this tax exemption may have

contributed to the more rapid growth of credit unions compared to other depository institutions.

Opponents of credit union taxation emphasize that credit unions provide many services free or below cost in order to assist low-income members. These services include small loans, financial counseling, and low-balance share drafts. They argue that the taxation of credit unions would create pressure to eliminate these subsidized services. But whether or not consumer access to basic depository services is a significant problem is disputed.

Rationale

Credit unions have never been subject to the Federal income tax. Initially, they were included in the provision that exempted domestic building and loan associations — whose business was at one time confined to lending to members — and nonprofit cooperative banks operated for mutual purposes. The exemption for mutual banks and savings and loan institutions was removed in 1951, but credit unions retained their exemption. No specific reason was given for continuing the exemption of credit unions.

In 1978, the Carter Administration proposed that the taxation of credit unions be phased in over a five-year period. In 1984, a report of the Department of the Treasury to the President proposed that the tax exemption of credit unions be repealed. In 1985, the Reagan Administration proposed the taxation of credit unions with over $5 million in gross assets. In the budget for fiscal year 1993, the Bush Administration proposed that the tax exemption for credit unions with assets in excess of $50 million be repealed. On March 16, 2004, Donald E. Powell, Chairman of the Federal Deposit Insurance Corporation, stated that "credit unions ought to pay taxes." On November 3, 2005, the House Ways and Means Committee held a hearing on "Review of Credit Union Tax Exemption." In the first session of the 110th Congress, the U.S. Treasury published two major studies concerning corporate tax reform: "Business Taxation and the Global Competitiveness," and "Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century." Both of these studies recommended broadening the corporate tax base by repealing various business tax breaks including the tax exempt status of credit unions. Officials of the credit union industry argued that these Treasury reports were in conflict with a 2004 letter from President Bush stating his support for the credit union tax exemption.

Assessment

Supporters of the credit union exemption emphasize the uniqueness of credit unions compared to other depository institutions. Credit unions are nonprofit financial cooperatives organized by people with a common bond,

which is a unifying characteristic among members that distinguishes them from the general public.

Credit unions are directed by volunteers for the purpose of serving their members. Consequently, the exemption's supporters maintain that credit unions are member-driven while other depository institutions are profit-driven. Furthermore, supporters argue that credit unions are subject to certain regulatory constraints not required of other depository institutions and that these constraints reduce the competitiveness of credit unions. For example, credit unions may only accept deposits of members and lend only to members, other credit unions, or credit union organizations.

Proponents of taxation argue that deregulation has caused extensive competition among all depository institutions, including credit unions, and that the tax exemption gives credit unions an unwarranted advantage. Proponents of taxation argue that depository institutions should have a level playing field in order for market forces to allocate resources efficiently.

Selected Bibliography

Bickley, James M. *Should Credit Unions be Taxed?* Library of Congress, Congressional Research Service Report 97-548. Washington, DC: Updated January 28, 2008.

Jolly, Robert W., Gary D. Koppenhaver, and Joshua D. Roe. *Growth of Large-Scale Credit Union in Iowa: Implications for Public Policy*. Ames, Iowa: Department of Economics, Iowa State University, Working Paper #04031, November 2004.

U.S. Congress, Congressional Budget Office. *Budget Options*. Washington, DC: U.S. Government Printing Office, February 2007, p. 294.

U.S. Government Accountability Office, *Issues Regarding the Tax-Exempt Status of Credit Unions*, Testimony before the House Committee on Ways and Means, November 3, 2005.

- . *Greater Transparency Needed on Who Credit Unions Serve and on Senior Executive Compensation Arrangements*, November 2006.

Tatom, John. *Competitive Advantage: A Study of the Federal Tax Exemption for Credit Unions*. Washington, DC: Tax Foundation, 2005.

EXCLUSION OF INVESTMENT INCOME ON LIFE INSURANCE AND ANNUITY CONTRACTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	26.8	2.6	29.4
2009	27.5	2.7	30.2
2010	28.2	2.7	30.9
2011	28.9	2.8	31.7
2012	29.7	2.9	32.6

Authorization

Sections 72, 101, 7702, 7702A.

Description

Life insurance companies invest premiums they collect, and returns on those investments help pay benefits. Amounts not paid as benefits may be paid as policy dividends or given back to policyholders as cash surrender values or loan values.

Policyholders are not generally taxed on this investment income, commonly called "inside build-up," as it accumulates. Insurance companies also usually pay no taxes on this investment income. Death benefits for most policies are not taxed at all, and amounts paid as dividends or withdrawn as cash values are taxed only when they exceed total premiums paid for the policy, allowing tax-free investment income to pay part of the cost of the insurance protection. Investment income that accumulates within annuity policies is also free from tax, but annuities are taxed on their investment component when paid.

Life insurance policies must meet tests designed to limit the tax-free accumulation of income. If investment income accumulates faster than is needed to fund the promised benefits, that income will be attributed to the owner of the policy and taxed currently. If a corporation owns a life insurance policy, investment income is included in alternative minimum taxable income.

Impact

The interest exclusion on life insurance savings allows policyholders to pay for a portion of their personal insurance with tax-free interest income. Although the interest earned is not currently paid to the policyholder, it is used to cover at least part of the cost of the insurance coverage, and it may be received in cash if the policy is terminated. In spite of limitations imposed in the late 1980s on the amount of income that can accumulate tax-free in a contract, the tax-free interest income benefit can be substantial.

The tax deferral for interest credited to annuity contracts allows taxpayers to save for retirement in a tax-deferred environment without restriction on the amount that can be invested for these purposes. Although the taxpayer cannot deduct the amounts invested in an annuity as is the case for contributions to qualified pension plans or some IRAs, the tax deferral on the income credited to life insurance investments represents a significant benefit to the taxpayer.

These provisions thus offer preferential treatment for the purchase of life insurance coverage and for savings held in life insurance policies and annuity contracts. Middle-income taxpayers, who make up the bulk of the life insurance market, reap most of this provision's benefits. Higher-income taxpayers, once their life insurance requirements are satisfied, generally obtain better after-tax yields from tax-exempt State and local obligations or tax-deferred capital gains.

Rationale

The exclusion of death benefits paid on life insurance dates back to the 1913 tax law (P.L. 63-16). While no specific reason was given for exempting such benefits, insurance proceeds may have been excluded because they were believed to be comparable to bequests, which also were excluded from the tax base.

The nontaxable status of the life insurance inside build-up and the tax deferral on annuity investment income also dates from 1913. Floor discussions of the bill made it clear that inside build-up was not taxable, and that amounts received during the life of the insured would be taxed only when they exceeded the investment in the contract (premiums paid), although these points were not included in the law explicitly. These views

were, in part, based on the general tax principle of constructive receipt. Policyholders, in this view, did not own the interest income because to receive that interest income they would have to give up the insurance protection or the annuity guarantees.

The inside build-up in several kinds of insurance products was made taxable to the policy owners in the late 1980s. (Corporate-owned policies were included under the minimum tax in the Tax Reform Act of 1986. The Deficit Reduction Act of 1984 and the Technical and Miscellaneous Revenue Act of 1988 imposed taxes on inside build-up and distributions for policies with an overly large investment component.) This change suggests that the Congress finds the exclusion rationale based on the constructive receipt doctrine unpersuasive in some cases. On the other hand, during consideration of the Tax Reform Act of 1986, Congress rejected a comprehensive proposal included in President Reagan's tax reform initiative that would have imposed current taxation on all inside build-up in life insurance policies. The President's Advisory Panel on Federal Tax Reform, which issued its final report in November 2005, recommended elimination of the exemption on life insurance investment earnings. Instead the Advisory Panel favored savings incentives which would treat various investment vehicles in a more neutral manner. Congress has enacted no legislation which would implement recommendations of the Advisory Panel.

Assessment

The tax treatment of policy income combined with the tax treatment of life insurance company reserves (see "Special Treatment of Life Insurance Company Reserves," below) makes investments in life insurance policies virtually tax-free. Cash value life insurance can operate as an investment vehicle that combines life insurance protection with a financial instrument that operates similarly to bank certificates of deposit and mutual fund investments. This exemption of inside build-up distorts investors' decisions by encouraging them to choose life insurance over competing savings vehicles such as bank accounts, mutual funds, or bonds. The result could be overinvestment in life insurance and excessive levels of life insurance protection relative to what would occur if life insurance products competed on a level playing field with other investment opportunities.

Many families, according to some economists, fail to buy enough life insurance to protect surviving family members from a sharp drop in income and living standards that the death of a wage-earner could cause. Such families, whose financial vulnerabilities are not offset by insurance benefits, may be described as underinsured. Encouraging families to buy more life insurance could reduce those families' financial vulnerabilities. Whether the tax exemption on life insurance benefits, however, induces families to buy prudent levels of life insurance is unclear. Better financial education, for

example, may provide a more direct route to helping families reduce financial vulnerabilities due to death or other serious disruptions.

The practical difficulties of taxing policy owners' inside build-up and the desire to avoid subjecting heirs to a tax on death benefits have discouraged many tax reform proposals covering life insurance. Taxing at the company level as a proxy for individual income taxation has been suggested as an alternative.

In the 1980s and 1990s, the inside build-up exclusion helped boost the number of corporate-owned life insurance (COLI) policies (also known as "employer-owned life insurance contracts"). Many firms, which had previously bought policies only for key personnel, bought life insurance on large numbers of lower level employees. Several newspaper articles highlighted purchases of COLI policies bought without employees' knowledge or consent, which were been termed "dead peasant insurance" or "janitor insurance." The IRS argued that such COLI policies served as a tax shelter and successfully sued several major corporations. Those cases limited some of the tax benefits of COLI policies. (See the 2006 Joint Tax Committee summary for citations.) The Pension Protection Act of 2006 (P. L. 109-280) limited tax benefits of COLI policies to key personnel and to benefits paid to survivors, and requires firms to obtain employees' written consent. (See IRS Form 8925, *Report of Employer-Owned Life Insurance Contracts*, for details.) The Joint Tax Committee estimated that these limits will have a negligible effect on revenues.

Selected Bibliography

Brumbaugh, David L. *Taxes and the "Inside Build-Up" of Life Insurance: Recent Issues*. Library of Congress, Congressional Research Service Report RS20923, August 2, 2006.

Christensen, Burke A. "Life Insurance: the Under-Appreciated Tax Shelter." *Trusts and Estates* 135 (November 1996), pp. 57-60.

Ernst & Young, *Federal Income Taxation of Property and Casualty Insurance Companies*, Hoboken, New Jersey: John Wiley and Sons, 1996.

Esperti, Robert A., et al. "Post-EGTRRA Life Insurance Planning: the Economic Growth and Tax Relief Reconciliation Act of 2001 Promises Repeal of the Estate Tax in 2010, But Will it Ever Come to Pass?" *The Tax Adviser* 33 (August 2002), pp. 532-537.

Gallagher, Gregory W. and Charles L. Ratner, eds. *Federal Income Taxation of Life Insurance*, 2nd edition. Chicago: American Bar Association, 1999.

Gokhale, Jagadeesh and Laurence J. Kotlikoff, "The Adequacy of Life Insurance," TIAA-CREF Institute working paper no. RD72, July 2002, available at [http://ssrn.com/abstract=325721].

Goode, Richard. "Policyholders' Interest Income from Life Insurance Under the Income Tax," *Vanderbilt Law Review* 15 (December 1962), pp. 33-55.

Harman, William B., Jr. "Two Decades of Insurance Tax Reform." *Tax Notes* 57 (November 12, 1992), pp. 901-914.

Kotlikoff, Lawrence J. *The Impact of Annuity Insurance on Savings and Inequality*, Cambridge, Mass.: National Bureau of Economic Research, 1984.

McClure, Charles E. "The Income Tax Treatment of Interest Earned on Savings in Life Insurance." In *The Economics of Federal Subsidy Programs.* Part 3: Tax Subsidies. (U.S. Congress, Joint Economic Committee.) Washington, DC: U.S. Government Printing Office, July 15, 1972.

Pike, Andrew D. *Taxation of Life Insurance Products: Background and Issues.* Library of Congress, Congressional Research Service Report RL32000, July 18, 2003.

President's Advisory Panel on Federal Tax Reform. *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System: Report of the President's Advisory Panel on Federal Tax Reform*. Washington, DC: November 2005.

Schultz, Ellen E. and Theo Francis, "Companies Profit on Workers' Deaths Through 'Dead Peasants' Insurance", *Wall Street Journal*, April 19, 2002

U.S. Congress, Committee on Ways and Means. *Technical and Miscellaneous Revenue Act of 1988.* Report to accompany H.R. 4333. 100th Congress, 2nd session. House Report 100-1104. Washington, DC: Government Printing Office, October 21, 1988, pp. 96-108.

U.S. Congress, Joint Committee on Taxation. "Life Insurance Tax Provisions." In *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Joint Committee Print, 98th Congress, 2nd session. Washington, DC: Government Printing Office, December 31, 1984.

— . *Tax Reform Proposals: Taxation of Insurance Products and Companies*. Joint Committee Print, 99th Congress, 1st session. Washington: Government Printing Office, September 20, 1985.

— . *Present-Law Federal Tax Treatment, Proposals, and Issues Relating to Company-Owned Life Insurance*, Joint Committee Print JCX-91-03, 108th Congress, 1st session. Washington: Government Printing Office, October 15, 2003

— . '*Technical Explanation of H.R. 4, The "Pension Protection Act of 2006," As Passed by the House on July 28, 2006, and As Considered by the Senate on August 3, 2006*." Joint Committee Print JCX-38-06, 109th Congress, 2nd session. Washington, DC: Government Printing Office, August 3, 2006, pp. 208-222.

— . '*Estimated Budget Effects of H.R. 4, The "Pension Protection Act of 2006," As Introduced in The House of Representatives on July 28, 2006*.' Joint Committee Print JCX-36-06 , 109th Congress, 2nd session. Washington, DC: Government Printing Office, July 28, 2006, p. 4.

U.S. Congressional Budget Office. "Options to Increase Revenues: Include Investment Income from Life Insurance and Annuities in Taxable Income." In *Budget Options*. Washington, DC: 2005.

U.S. Department of the Treasury. *Report to the Congress on the Taxation of Life Insurance Company Products*. Washington, DC: March 30, 1990.

Vickrey, William S. "Insurance Under the Federal Income Tax," *Yale Law Journal* 52 (June 1943), pp. 554-585.

Webel, Baird. *Corporate Owned Life Insurance (COLI): Insurance and Tax Issues,* Library of Congress, Congressional Research Service Report RL33414, May 29, 2007.

SMALL LIFE INSURANCE COMPANY TAXABLE INCOME ADJUSTMENT

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.1	0.1
2009	-	0.1	0.1
2010	-	0.1	0.1
2011	-	0.1	0.1
2012	-	0.1	0.1

Authorization

Section 806.

Description

Life insurance companies with gross assets less than $500 million may take a special "small life insurance company deduction." This deduction is 60 percent of life insurance company taxable income (before the deduction) for a tax year up to $3 million. For life insurance company taxable income between $3 million and $15 million, the deduction is $1.8 million minus 15 percent of the taxable income above $3 million. That is, the deduction phases out as a company's taxable insurance income (before the deduction) increases from $3 million to $15 million. A company with taxable insurance income over $15 million (before the deduction) cannot take the small life insurance company deduction. The taxable income and gross asset standards are generally applied using consolidated group tests.

For example, a company meeting the gross assets requirement with life insurance company taxable income of $2 million would be eligible for a deduction of $1.2 million. A company meeting the gross assets requirement

with life insurance company taxable income of $10 million would be eligible for a deduction of $750 thousand (i.e., $1.8 million minus 15 per cent of $7 million).

Impact

The small life insurance company deduction reduces the tax rate for "small" life insurance companies. An insurer with assets of up to $500 million and taxable incomes of up to $15 million is small relative to very large companies that comprise most of the industry. A company eligible for the maximum small company deduction of $1.8 million (i.e., for a company with life insurance company taxable income of exactly $3 million) is, in effect, taxed at a rate of 13.6 percent instead of the regular 34 percent corporate rate.

Determining how benefits for the small life insurance company deduction are distributed is difficult because ownership of these companies may be widely dispersed, either among shareholders in stock companies or policyholders in mutual companies. Competitive pressures may force companies to pass some of these benefits on to life insurance policyholders via lower premiums.

Rationale

The Deficit Reduction Act of 1984 (P.L. 98-369), which made major revisions to the taxation of life insurance companies, included a small life insurance company deduction. The Senate Finance Committee in 1984 noted that "small life insurance companies have enjoyed a tax-favored status for some time." For example, early 20th century tax laws, such as the 1909 law (P.L. 61-5, §38), excluded "fraternal beneficiary societies, orders, or associations operating under the lodge system," which according to some estimates, provided life insurance to about 30 per cent of the adult population. The Senate Finance Committee in 1984 concluded that while "Congress believed that, without this provision [the small life insurance company deduction], the Act provided for the proper reflection of taxable income, . . . it would not be appropriate to dramatically increase their tax burden at this time."

A companion provision (the special life insurance company deduction), which allowed all life insurance companies a deduction of 20 per cent of tentative life insurance company taxable income, was repealed in the Tax Reform Act of 1986 (P. L. 99-514, § 1011(a)). The deduction for small companies, however, was retained.

Assessment

The principle of basing taxes on the ability to pay, often put forth as a requisite of an equitable and fair tax system, does not justify reducing taxes on business income for firms below a certain size. Tax burdens are ultimately borne by persons, such as business *owners,* customers, employees, or other individuals, not by firms. The burden that a business's taxes places on a person is not determined by the size of the business.

Imposing lower tax rates on smaller firms distorts the efficient allocation of resources, since it offers a cost advantage based on size and not economic performance. This tax reduction serves no simplification purpose, since it requires an additional set of computations and some complex rules to prevent abuses. It may help newer insurance companies become established and build up the reserves required by State laws.

Selected Bibliography

Benito, David T. "'This Enormous Army:' The Mutual-Aid Tradition of American Fraternal Societies Before the 20th Century," in *The Voluntary City* (eds., David T. Beito, Peter Gordon, and Alexander Tabarrok), Ann Arbor, MI: Michigan University Press, 2002.

U.S. Congress, Joint Committee on Taxation. "Tax Treatment of Life Insurance Companies." In *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Joint Committee Print, 98th Congress, 2nd session. Washington, DC: Government Printing Office, December 31, 1984, pp. 582-593.

— . *Tax Reform Proposals: Taxation of Insurance Products and Companies*. Joint Committee Print, 99th Congress, 1st session. Washington, DC: Government Printing Office, September 20, 1985.

SPECIAL TREATMENT OF LIFE INSURANCE COMPANY RESERVES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	2.0	2.0
2009	—	2.1	2.1
2010	—	2.2	2.2
2011	—	2.3	2.3
2012	—	2.4	2.4

Authorization

Sections 803(a)(2), 805(a)(2), 807.

Description

Life insurance companies can deduct net additions to reserves used to pay future liabilities and must add net subtractions to reserves to its income, subject to certain requirements on reserves set out in Section 807. The ability to deduct net additions to reserves may allow life insurance companies to defer paying some taxes, thus reducing those companies' tax burden by allowing them to offset current income with future expenses. The match between the timing of taxable income and deductible expenses is, in general, closer for other businesses.

Special provisions govern the taxation of life insurance companies, which reflect the nature of the life insurance market. First, a life insurance company must count all premiums paid by insurance customers as income. Second, a company may deduct net additions to its life insurance reserves.

For example, after a customer signs an insurance contract and pays a one-time premium of $5000, the company records that amount as income. If the policy promises the beneficiary a payment of $100,000 when the customer dies, then the company puts aside some portion of the premium into a reserve to cover that payment, which is deducted from the insurer's income. The insurer performs an actuarial calculation to find the present value of the insurance benefit, which is the minimum investment needed to fund the expected costs of a $100,000 payout when the customer dies. If the firm calculates that the present value of the life insurance benefit is $3000 then the firm earns an underwriting profit of $2000, net of other expenses. If when the customer died, the portion of the insurance reserve tied to that contract were $95,000, the insurer would show a net deduction $5,000 (i.e., the $100,000 payout minus the $95,000 reserve).

If the insurer used more conservative actuarial assumptions, so that present value of the life insurance benefit were calculated to be $4000, then the underwriting profit would be only $1000. Thus, using more conservative actuarial assumptions reduces the insurer's taxable income by $1000 in the current tax year, and increases the size of the accumulated reserve at the time of the customer's death, which increases the insurer's taxable income in the future. Thus, more conservative actuarial assumptions reduce underwriting profits (taxable now) and increase the surplus of the accumulated reserves over payouts in the future, allowing firms to defer taxation by converting underwriting profits into reserves. For that reason, Section 807 provides detailed requirements on actuarial assumptions used to calculate appropriate levels of reserves.

Impact

Reserves are accounts recorded in the liabilities section of balance sheets to indicate a claim against assets for future expenses. When life insurance companies can deduct additions to the reserve accounts when computing taxable income, they could purchase assets using tax-free (or tax-deferred) income. Reserve accounting shelters both premium and investment income from tax because amounts are added to reserves include both premium income and the investment income earned by the invested assets. A large part of the reserves of life insurance companies is credited to individual policyholders, who also pay no tax on this investment income (see "*Exclusion of Investment Income on Life Insurance and Annuity Contracts*," above).

Competition in the life insurance market could compel companies to pass along corporate tax reductions to policyholders. Thus, this tax expenditure may benefit life insurance consumers as well as shareholders of private stock insurance companies. For mutual life insurance companies, policyholders may benefit either through lower premiums, better service, or higher policyholder dividends.

Rationale

The 1909 corporate income tax (P.L. 61-5) allowed insurance companies to deduct additions to reserves required by law and sums (besides dividends) paid on claims and annuities within the year. Some form of reserve deduction has been allowed ever since. Originally, the accounting rules of most regulated industries were adopted for tax purposes, and reserve accounting was required by all State insurance regulations. The many different methods of taxing insurance companies tried since 1909 have all allowed some form of reserve accounting.

Before the Deficit Reduction Act of 1984, which set the current rules for taxing life insurance companies, reserves were those required by State law and generally computed by State regulatory rules. The Congress, concluding that the conservative regulatory rules allowed a significant overstatement of deductions, set rules for tax reserves that specified what types of reserves would be allowed and what discount rates would be used.

Assessment

Reserve accounting allows the deduction of expenses relating to the future from current income. Reserve accounting is standard among State insurance regulators, which supervise life insurance companies operating in their State. The primary goal of State insurance regulators is actuarial solvency: that is, ensuring that companies will be able to pay promised benefits. The understatement of current income and conservative actuarial assumptions in that context is a virtue rather than a vice.

Under the federal income tax, however, understating current income provides a tax advantage. Combined with virtual tax exemption of life insurance product income at the individual level, this tax advantage makes life insurance a far more attractive investment vehicle than it would otherwise be and leads to the overpurchase of insurance and overinvestment in insurance products.

One often-proposed solution would retain reserve accounting but limit the deduction to amounts actually credited to the accounts of specific policyholders, who would then be taxed on the additions to their accounts. This would assure that all premium and investment income not used to pay current expenses was taxed at either the company or individual level, more in line with the tax treatment of banks, mutual funds, and other competitors of the life insurance industry.

Selected Bibliography

Aaron, Henry J. *The Peculiar Problem of Taxing Life Insurance Companies*. Washington, DC: The Brookings Institution, 1983.

Harman, William B., Jr. "Two Decades of Insurance Tax Reform." *Tax Notes* 57 (November 12, 1992), pp. 901-914.

Kopcke, Richard W. "The Federal Income Taxation of Life Insurance Companies." *New England Economic Review*. (March/April 1985), pp. 5-19.

Pike, Andrew D. *Taxation of Life Insurance Companies*. Library of Congress, Congressional Research Service Report RL32180, December 24, 2003.

Taylor, Jack. "Federal Taxation of the Insurance Industry." In *The Encyclopedia of Taxation and Tax Policy (2nd ed.)*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington DC: Urban Institute Press, 2005.

U.S. Congress, Joint Committee on Taxation. "Life Insurance Tax Provisions." In *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Joint Committee Print, 98th Congress, 2d session. Washington, DC: Government Printing Office, December 31, 1984.

— . *Tax Reform Proposals: Taxation of Insurance Products and Companies*. Joint Committee Print, 99th Congress, 1st session. Washington, DC: Government Printing Office, September 20, 1985.

— . *Taxation of Life Insurance Companies.* Joint Committee Print, 101st Congress, 1st session. Washington, DC: Government Printing Office, October 16, 1989, pp. 8-11.

U.S. Department of the Treasury. *Final Report to the Congress on Life Insurance Company Taxation*. Washington, DC, 1989.

— . *Tax Reform for Fairness, Simplicity, and Economic Growth, Volume 2, General Explanation of the Treasury Department Proposals*. Washington, DC, November 1984, pp. 268-269.

U.S. General Accounting Office, *Tax Treatment of Life Insurance and Annuity Accrued Interest, Report to the Chairman of the House Ways and Means Committee and Senate Finance Committee*, GAO/GGD-90-31, January 1990, available at [http://archive.gao.gov/d27t7/140600.pdf].

SPECIAL DEDUCTION FOR BLUE CROSS AND BLUE SHIELD COMPANIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	1.0	1.0
2009	-	1.0	1.0
2010	-	1.1	1.1
2011	-	1.1	1.1
2012	-	1.1	1.1

Authorization

Section 833.

Description

Blue Cross and Blue Shield and a number of smaller health insurance providers that existed on August 16, 1986, and other nonprofit health insurers that meet certain community-service standards receive special tax treatment. First, eligible health insurers are treated in the tax law as stock property and casualty insurance companies. Eligible organizations, however, can fully deduct unearned premiums, unlike other property and casualty insurance companies. Second, eligible companies may take a special deduction of 25 percent of the year's health-related claims and expenses minus its accumulated surplus at the beginning of the year (if such claims and expenses exceed the accumulated surplus). For example, if an eligible health insurer had claims and related expenses of $150 million and an accumulated surplus of $110 million during a tax year, it could take a special deduction of $10 million (i.e., 25 percent of the difference between $150 million and $110 million). The special deduction is also known as the "three-month" deduction because when an eligible insurer's health-related

claims and expenses exceed its accumulated surplus, it may deduct a quarter of the difference for the year.

The special deduction only applies to net taxable income for the year and cannot be used in alternative minimum tax calculations. Therefore, net income for eligible organizations is subject to a minimum tax rate of 20 percent.

Impact

Blue Cross/Blue Shield organizations traditionally provided community-rated health insurance. The special deduction for Blue Cross/Blue Shield plans may help offset costs of providing high-risk and small-group coverage. The Blue Cross/Blue Shield organizations are not owned by investors, so the special deduction could also benefit either their subscribers or all health insurance purchasers (through reduced premiums), their managers and employees (through increased compensation), or affiliated hospitals and physicians (through increased fees).

Rationale

The "Blues" had been ruled tax-exempt by Internal Revenue regulations since their inception in the 1930s, apparently because they were regarded as community service organizations. The Tax Reform Act of 1986 removed Blue Cross/Blue Shield plans' tax exemption because Congress believed that "exempt charitable and social welfare organizations that engage in insurance activities are engaged in an activity whose nature and scope is inherently commercial rather than charitable," and that "the tax-exempt status of organizations engaged in insurance activities provided an unfair competitive advantage." The 1986 Act, however, introduced the special deduction described above, in part because of their continuing, albeit more limited, role in providing community-rated health insurance. In particular, Section 833(c)2(c) links the special deduction for Blue Cross/Blue Shield plans to the provision of high-risk and small-group coverage.

Assessment

Differences in price and coverage between the health insurance products offered by Blue Cross and Blue Shield plans and those offered by commercial insurers, in the view of Congress, have faded over time. Some of the plans have accumulated enough surplus to purchase unrelated businesses. Many receive a substantial part of their income from administering Medicare or self-insurance plans of other companies. Some have argued that these tax preferences have benefitted their managers and their affiliated hospitals and physicians more than their communities.

Blue Cross and Blue Shield organizations, however, retain a commitment to offer high-risk and small-group insurance coverage in their charters. Some continue to offer policies with premiums based on community payout experience ("community rated"). The tax exemption previously granted to the "Blues," as well as the current special deduction, presumably have helped support these community-oriented activities.

Selected Bibliography

Embry-Thompson, Leah D. and Robert K. Kolbe. "Federal Tax Exemption of Prepaid Health Care Plans after IRC 501(m)." Exempt Organizations 1992 Continuing Professional Education Text. Available at [www.irs.gov/pub/irs-tege/eotopicl92.pdf].

Ernst & Young, *Federal Income Taxation of Property and Casualty Insurance Companies*, Hoboken, New Jersey: John Wiley and Sons, 1996.

Law, Sylvia A. *Blue Cross: What Went Wrong?* New Haven: Yale University Press, 1974.

McGovern, James J. "Federal Tax Exemption of Prepaid Health Care Plans." *The Tax Adviser* 7 (February 1976), pp. 76-81.

McNurty, Walter. "Big Questions for the Blues: Where to from Here?" *Inquiry* 33 (Summer 1996), pp. 110-117.

Shill, Otto, "Revocation of Blue Cross and Blue Shield's Tax-Exempt Status: An Unhealthy Change?" *Boston University Journal of Tax Law*, vol. 6, pp. 147-176.

Starr, Paul. *The Social Transformation of American Medicine*. New York: Basic Books, 1983, pp.290-310.

Taylor, Jack. *Blue Cross/Blue Shield and Tax Reform*. Library of Congress, Congressional Research Service Report 86-651 E. Washington, DC: April 9, 1986.

— . *Income Tax Treatment of Health Care Insurers*. Library of Congress, Congressional Research Service Report 94-772 E. Washington, DC: October 5, 1994.

U.S. Congress, Joint Committee on Taxation. "Tax Exempt Organizations Engaged in Insurance Activities." In *General Explanation of the Tax Reform Act of 1986.* Joint Committee Print, 100th Congress, 1st session. Washington, DC: Government Printing Office, May 4, 1987, pp. 583-592.

— . *Description and Analysis of Title VII of H.R. 3600, S. 1757, and S. 1775 ("Health Security Act")*, Joint Committee Print, 103rd Congress, 1st session. Washington, DC: Government Printing Office, December 20, 1993, pp. 82-96.

U.S. General Accounting Office, *Health Insurance: Comparing Blue Cross and Blue Shield Plans With Commercial Insurers*, HRD-86-110, July 11, 1986 , available at [http://archive.gao.gov/d4t4/130462.pdf].

U.S. Internal Revenue Service, "Conversion of Nonprofit Organizations, coordinated issue paper LMSB-04-0408-024, June 4, 2008, available at [http://www.irs.gov/businesses/article/0,,id=183646,00.html].

Wasley, Terree P. "Health Care in the Twentieth Century: A History of Government Interference and Protection." *Business Economics* 28 (April 1993), pp. 11-17.

Weiner, Janet Ochs. "The Rebirth of the Blues." *Medicine and Health* Supplement (February 18, 1991).

TAX-EXEMPT STATUS AND ELECTION TO BE TAXED ONLY ON INVESTMENT INCOME FOR CERTAIN SMALL NON-LIFE INSURANCE COMPANIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.1	0.1
2009	-	0.1	0.1
2010	-	0.1	0.1
2011	-	0.1	0.1
2012	-	0.1	0.1

Authorization

Sections 321(a), 832, 834, 501(c)(15).

Description

Insurance companies not classified as life insurance companies, which for the most part are property and casualty insurance companies, enjoy tax-exempt status if their gross receipts for a tax year are $600,000 or less and if premiums account for 50 percent or less of those gross receipts. Mutual insurance companies may enjoy tax-exempt status if their gross receipts for a tax year are $150,000 or less, and if more than 35 percent of those gross receipts consist of premiums. This tax-exempt status is subject to a controlled group rule. Legislation enacted in 2004 (P.L. 108-218) changed the gross receipt's requirements to limit certain tax sheltering strategies using 501(c)(15) insurers.

Slightly larger insurance companies not classified as life insurance companies may elect to be taxed only on its taxable investment income so long as net written premiums and direct written premiums each do not

exceed $1.2 million. Small non-life insurance companies that elect to receive this tax treatment cannot reverse that decision without a waiver from the Treasury Secretary. The small non-life insurance election provision is subject to a 50 per cent controlled group rule.

Impact

Some very small non-life insurance companies are exempted from taxation entirely, while slightly larger non-life insurance companies may choose a potentially advantageous tax status instead of being taxed at the regular corporate tax rate of 34 per cent.

Determining how benefits of the small non-life insurance company deduction are distributed is difficult because ownership of some of these companies may be widely dispersed. Competitive pressures may force companies to pass some of these benefits on to insurance policyholders via lower premiums. In other cases, a set of companies may set up a "captive" or "minicaptive" insurance company, which provides insurance policies in exchange for premiums. In these cases, stakeholders in the parent companies benefit from the tax exemption. The insurance company, however, must accomplish bona fide "risk shifting" and "risk distribution" in order to qualify as an insurance company under tax law.

Rationale

Early 20th century tax laws, such as the 1909 law (P.L. 61-5, §38), excluded "fraternal beneficiary societies, orders, or associations operating under the lodge system," which according to some estimates, provided life insurance to about 30 per cent of the adult population. Since that time, small insurance companies of all types have received various tax advantages. The Revenue Act of 1954, included mutual non-life and non-marine insurance companies with gross receipts of $150,000 or less among the tax-exempt institutions set out in section 501(c). These provisions may have been included to encourage formation of small insurance companies to serve specific groups of individuals or firms that could not easily obtain insurance through existing insurers.

The Tax Reform Act of 1986 broadened the exemption by allowing individuals and corporations to take advantage of the exemption, and increased the cap on gross receipts to $350,000. Congress held that previous provisions affecting small insurers were "inordinately complex" and the "small company provision [should be extended] to all eligible small companies, whether stock or mutual." After the 1986 change, several wealthy individuals and corporations were able to avoid large amounts of taxes by creating 501(c)(15) insurers that were used to hold reserves in excess of levels required to pay claims. Legislation enacted in 2004 (P.L.

108-218) changed the gross receipt's requirements to these 501(c)(15) insurance company tax sheltering strategies.

Assessment

The principle of basing taxes on the ability to pay, often put forth as a requisite of an equitable and fair tax system, does not justify reducing taxes on business income for firms below a certain size. Tax burdens are ultimately borne by persons, such as business *owners,* customers, employees, or other individuals, not by firms. The burden that a business's taxes place on a person is not determined by the size of the business.

Imposing lower tax rates on smaller firms distorts the efficient allocation of resources, since it offers a cost advantage based on size and not economic performance. This tax reduction serves no simplification purpose, since it requires an additional set of computations and some complex rules to prevent abuses. It may help newer insurance companies become established and build up the reserves required by State laws, although it may also help perpetuate inefficient insurance companies.

Selected Bibliography

Adkisson, Jay. *Adkisson's Captive Insurance Companies: An Introduction to Captives, Closely-Held Insurance Companies, and Risk Retention Groups*, Bloomington, IN: iUniverse, 2006.

Beito, David T. "'This Enormous Army:' The Mutual-Aid Tradition of American Fraternal Societies Before the 20th Century," in *The Voluntary City* (eds., David T. Beito, Peter Gordon, and Alexander Tabarrok), Ann Arbor, MI: University of Michigan Press, 2002.

Ernst & Young, *Federal Income Taxation of Property and Casualty Insurance Companies*, Hoboken, New Jersey: John Wiley and Sons, 1996.

Johnston, David C. "Help for Bad Times Now Helps Rich." *New York Times*, April 1, 2003, p. C1.

— . *Perfectly Legal*, New York: Penguin, 2003, ch. 13.

U.S. Congress, Joint Committee on Taxation. "Property and Casualty Insurance Company Taxation." In *General Explanation of the Revenue Provisions of the Tax Reform Act of 1986.* Joint Committee Print, 100th Congress, 1st session. Washington, DC: Government Printing Office, May 4, 1987, pp. 619-621.

— . *Tax Reform Proposals: Taxation of Insurance Products and Companies*. Joint Committee Print, 99th Congress, 1st session. Washington, DC: Government Printing Office, September 20, 1985.

U.S. Internal Revenue Service, "IRC 501(c)(15) - Small Insurance Companies or Associations," *Exempt Organization Continuing Professional Education Text*, 1989, available at:
[http://www.irs.ustreas.gov/pub/irs-tege/eotopicl89.pdf].

— . "Modification of Exemption From Tax for Small Property and Casualty Insurance Companies," Notice 2004-64.

— . "Determination of Gross Receipts for Purposes of Section 501(c)(15), Notice 2006-42

— . Revenue Ruling 2005-40, *Internal Revenue Bulletin* 2005-27, July 5, 2005.

INTEREST RATE AND DISCOUNTING PERIOD ASSUMPTIONS FOR RESERVES OF PROPERTY AND CASUALTY INSURANCE COMPANIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.6	0.6
2009	-	0.6	0.6
2010	-	0.7	0.7
2011	-	0.7	0.7
2012	-	0.7	0.7

Authorization

Sections 831, 832(b), 846

Description

The way in which the present values of future losses for property and casualty insurance companies are calculated may provide those insurers with a tax advantage. A present value is the current equivalent value of a given cash flow, and is calculated using interest rates or discount factors and information about the timing of income and losses. Most businesses calculate taxable income by deducting expenses when the business becomes liable for paying them. A significant portion of losses paid by property and casualty insurance companies are paid years after premiums were collected. State regulators typically require insurers to maintain minimum levels of loss reserves to ensure solvency, that is, the ability to pay all future claims. On the other hand, if loss reserves are well above levels needed to ensure solvency, an insurer may be able to shift current earnings into future years, thus deferring tax payments. In other words, some form of discounting is appropriate to ensure that premium income, received when a policy is

written, is properly matched with associated losses that occur later. If losses in future years are not fully discounted, the insurer may enjoy a tax advantage through the ability to defer loss payments.

Each year, the Treasury Secretary specifies discount factors (based on interest rates and an estimated profile of losses over time) for various lines of property and casualty insurance that insurers use to compute present values of future losses for tax purposes. In some cases, property and casualty insurers may use discount rates reflecting their own claims experience. A financially sophisticated insurer, however, may be able to finance future loss payouts more cheaply than calculations based on tax law and Treasury-specified discount rates would indicate. In effect, this would allow an insurer to shift some net earnings into the future, thus deferring and lowering its tax burden.

In particular, under current law the Treasury Department calculates an interest rate that is used to develop discount rates for computing present values of loss reserves. Long-term market interest rates, however, are generally higher than short-term interest rates because investors typically require a higher yield for investments that limit their choices for a longer period of time. This suggests that the present value of losses paid in the near future, calculated using present tax methods, may be overstated relative to market values, while the present value of losses paid farther into the future may be underestimated. In addition, the current tax law truncates the stream of losses. For example, for some lines of insurance, losses that occur more than ten years in the future are treated for tax purposes as occurring ten years in the future. This truncation tends to increase the estimated present value of losses under current tax methods.

Impact

If the net present value of losses payable by property and casualty insurers calculated for tax purposes is greater than the true net present value of those losses based on efficient financial strategies, then those insurance companies may enjoy some managerial discretion on how net earnings are allocated over time. That discretion may allow management of insurers to reduce their federal tax burden, or to smooth earnings to make the insurer's stock more attractive to investors.

Determining the distribution of benefits of this tax provision is difficult because ownership of most property and casualty insurance companies is widely dispersed, either among shareholders in stock companies or policyholders in mutual companies. Competitive pressures may force companies to pass some of these benefits on to property and casualty insurance policyholders via lower premiums.

Rationale

Property and casualty insurers' loss reserve deductions before the Tax Reform Act of 1986 were based on the simple sum of expected payments for claim losses. Congress determined that this practice did not accurately measure the costs of these insurers, because property and casualty insurance companies, unlike other taxpayers, could deduct losses before they were paid. Because current dollars are more valuable than future dollars because of the time value of money, allowing insurers to deduct losses ahead of actual payment reduced insurers's tax burden.

Since 1987, the loss reserve deduction has been calculated using a discounted loss reserve. The allowable current-year deduction for loss reserves since 1987 has been the accident-year's discounted loss reserve at the beginning of the tax year plus the strengthening in all prior accident-year discounted loss reserves. While these discounting rules reduced insurers' tax advantages, the discounting methodology implemented by the Tax Reform Act of 1986 probably overstates the true market-based present value of future losses of these insurers.

Requiring most property and casualty companies to calculate the present value of future losses using a methodology given by the Tax Reform Act of 1986 using discount rates specified by the Treasury may simplify the calculation of tax liability for those insurers. In addition, the relative simplicity of these methods may help ensure that the tax treatment of property and casualty companies is uniform. In addition, the computational and administrative burden on the Treasury Department may be minimized by using simple discounting and loss profile methods. Most large property and casualty companies, however, have been considered financially sophisticated firms, which would use standard strategies to minimize the costs of carrying loss reserves.

Assessment

Allowing some firms, such as property and casualty insurance companies, to defer certain tax liabilities requires other taxpayers to bear higher burdens, or reduces federal revenues. This tax provision may serve a simplification purpose, although the Treasury Department and insurance companies are likely well equipped to promulgate and apply discounting methods that more closely approximate efficient financing strategies for loss reserve management. Allowing property and casualty insurance companies an advantageous tax status, based on the potential mismatch between simple tax rules and actual financial management practices, may allow those insurers to attract economic resources from other sectors of the economy, thus creating economic inefficiencies.

Selected Bibliography

Anthony, J. and K. Petroni. "Accounting Estimation Errors and Firm Valuation in the Property-Casualty Insurance Industry." *Journal of Accounting, Auditing, and Finance* (Summer 1997), pp. 257-281.

Beaver, W. and M. McNichols. The Characteristics and Valuation of Loss Reserves of Property-Casualty Insurers. *Review of Accounting Studies 3* (1998), pp. 73-95.

Browne, Mark J., Yu-Luen Ma, and Ping Wang. "Stock Option Compensation and Managerial Discretion in the Insurance Industry: Are Reserves Manipulated to Enhance Profitability?" Working paper, December 3, 2004. Available at <http://ssrn.com/abstract=629383>.

Ernst & Young, *Federal Income Taxation of Property and Casualty Insurance Companies*, Hoboken, New Jersey: John Wiley and Sons, 1996.

Petroni, K. "Optimistic Reporting in the Property-Casualty Insurance Industry." *Journal of Accounting and Economics* 15 (December 1992.), pp. 485-508.

Randolph, David W., Gerald L. Salamon, and Jim A Seida. "Quantifying the Costs of Intertemporal Taxable Income Shifting: Theory and Evidence from the Property-Casualty Insurance Industry." Working paper, February 18, 2004. Available at <http://ssrn.com/abstract=546297>.

Ryan, S. and J. Wahlen. "Discretionary and Non-discretionary Revisions of Loss Reserves by Property-Casualty Insurers: Differential Implications for Future Profitability, Risk, and Market Value." *Review of Accounting Studies 5,* 2000, pp. 95-125.

U.S. Congress, Joint Committee on Taxation. "Property and Casualty Insurance Company Taxation." In *General Explanation of the Revenue Provisions of the Tax Reform Act of 1986.* Joint Committee Print, 100th Congress, 1st session. Washington, DC: Government Printing Office, May 4, 1987, pp. 600-618.

U.S. Internal Revenue Service, *Revenue Proc. 2002-74*, 2002-2 C.B. 980.

— . Revenue Proc. 2007-9, *Internal Revenue Bulletin* 2007-3, January 16, 2007.

15-PERCENT PRO-RATION FOR PROPERTY AND CASUALTY INSURANCE COMPANIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	2.0	2.0
2009	—	2.1	2.1
2010	—	2.2	2.2
2011	—	2.3	2.3
2012	—	2.4	2.4

Authorization

Section 832(b).

Description

A property and casualty insurance company's taxable income during a tax year is its underwriting income (i.e., premiums minus incurred losses and expenses) plus investment income and certain other income items minus allowable deductions. Additions to loss reserves, held to pay future claims, can also be deducted from taxable income under certain conditions. The Tax Reform Act of 1986 imposed the 15 percent pro-ration provision, as Congress held that using tax-exempt investments to finance additions to loss reserves was "inappropriate." Therefore, the allowable deduction for additions to loss reserves was reduced to 15 percent of (i) the insurer's tax-exempt interest, (ii) the deductible portion of dividends received (with special rules for dividends from affiliates), and (iii) the increase for the taxable year in the cash value of life insurance, endowment or annuity contracts.

Impact

The 15 percent proration provision does not remove all of the benefit of holding tax-exempt investment to property and casualty insurance companies. At the typical corporate income tax rate of 35%, a property or casualty insurance company would in the simplest case pay an effective tax rate of 15% × 35% = 5.25% on income from tax exempt investments. The corporate alternative minimum tax and certain other tax provisions, however, may cap the advantage of holding higher proportions of tax-exempt securities.

Rationale

This 15-percent pro-ration requirement was enacted in 1986 because Congress believed that "it is not appropriate to fund loss reserves on a fully deductible basis out of income which may be, in whole or in part, exempt from tax. The amount of the reserves that is deductible should be reduced by a portion of such tax-exempt income to reflect the fact that reserves are generally funded in part from tax-exempt interest or from wholly or partially deductible dividends." The Taxpayer Relief Act of 1997 (P.L. 105-34) expanded the 15-percent pro-ration rule to apply to the inside buildup on certain insurance contracts.

In 1999, the Clinton Administration proposed increasing pro-ration for insurance companies from 15 percent to 25 percent.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA, P.L. 108-27) changed the pro-ration treatment of life insurance subsidiaries of property and casualty firms. Pro-ration requirements for life insurance companies differ from those for property and casualty companies. JGTRRA let property and casualty companies apply life insurance pro-ration rules to their life insurance reserves. Previously, this was allowed only if life insurance reserves (or reserves for noncancellable accident and health policies) comprised at least half of an insurer's total reserves.

Assessment

The 15-percent pro-ration provision allows property and casualty insurance companies to fund a substantial portion of their deductible reserves with tax-exempt or tax-deferred income. Life insurance companies, banks and brokerage firms, and other financial intermediaries, face more stringent proration rules that prevent or reduce the use of tax-exempt or tax-deferred investments to fund currently deductible reserves or deductible interest expense. Allowing property and casualty insurance companies an advantageous tax status, based on the ability to use tax-exempt income to

reduce tax liabilities, may allow those insurers to attract economic resources from other sectors of the economy, thus creating economic inefficiencies.

Selected Bibliography

Ernst & Young, *Federal Income Taxation of Property and Casualty Insurance Companies*, Hoboken, New Jersey: John Wiley and Sons, 1996, pp. 85-86.

Testimony of Assistant Treasury Secretary Donald Lubick, in U.S. Congress, Senate Finance Committee, hearings, 106th Cong., 1st sess., April 27, 1999.

Nobles, Tsana. "Strategic Asset Allocation: Use of Tax-Exempt Securities," *Dwight Asset Management Company Market News and Analysis*, February 2008. Available at: <http://www.dwight.com/pubs/dwight_strategic_asset_allocation_0208.pdf>.

U.S. Congress, Joint Committee on Taxation. "Property and Casualty Insurance Company Taxation." In *General Explanation of the Revenue Provisions of the Tax Reform Act of 1986.* Joint Committee Print, 100th Congress, 1st session. Washington, DC: Government Printing Office, May 4, 1987, pp. 594-600.

— . *Tax Reform Proposals: Taxation of Insurance Products and Companies*. Joint Committee Print, 99th Congress, 1st session. Washington, DC: Government Printing Office, September 20, 1985.

— . H.R. Rep. No. 108-126, *Jobs and Growth Tax Relief Reconciliation Act of 2003: Conference Report to Accompany H.R. 2,* 108th Cong., 1st sess., May 22, 2003, pp. 155-156.

DEDUCTION FOR MORTGAGE INTEREST ON OWNER-OCCUPIED RESIDENCES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	67.0	-	67.0
2009	80.1	-	80.1
2010	89.4	-	89.4
2011	99.8	-	99.8
2012	107.3	-	107.3

Authorization

Section 163(h).

Description

A taxpayer may claim an itemized deduction for "qualified residence interest," which includes interest paid on a mortgage secured by a principal residence and a second residence. The underlying mortgage loans can represent acquisition indebtedness of up to $1 million, plus home equity indebtedness of up to $100,000.

Impact

The deduction is considered a tax expenditure because homeowners are allowed to deduct their mortgage interest even though the implicit rental income from the home (comparable to the income they could earn if the home were rented to someone else) is not subject to tax.

Renters and the owners of rental property do not receive a comparable benefit. Renters may not deduct any portion of their rent under the Federal income tax. Landlords may deduct mortgage interest paid for rental property, but they are subject to tax on the rental income.

For taxpayers who can itemize, the home mortgage interest deduction encourages home ownership by reducing the cost of owning compared with renting. It also encourages them to spend more on housing (measured before the income tax offset), and to borrow more than they would in the absence of the deduction.

The mortgage interest deduction primarily benefits middle- and upper-income households. Higher-income taxpayers are more likely to itemize deductions. As with any deduction, a dollar of mortgage interest deduction is worth more the higher the taxpayer's marginal tax rate.

Higher-income households also tend to have larger mortgage interest deductions because they can afford to spend more on housing and can qualify to borrow more. The home equity loan provision favors taxpayers who have been able to pay down their acquisition indebtedness and whose homes have appreciated in value.

Distribution by Income Class of the Tax Expenditure for Mortgage Interest, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0%
$10 to $20	0.1%
$20 to $30	0.5%
$30 to $40	1.3%
$40 to $50	2.3%
$50 to $75	10.6%
$75 to $100	12.2%
$100 to $200	43.3%
$200 and over	29.7%

Rationale

The income tax code instituted in 1913 contained a deduction for all interest paid, with no distinction between interest payments made for business, personal, living, or family expenses. There is no evidence in the legislative history that the interest deduction was intended to encourage home ownership or to stimulate the housing industry at that time. In 1913

most interest payments represented business expenses. Home mortgages and other consumer borrowing were much less prevalent than in later years.

Before the Tax Reform Act of 1986 (TRA86), there were no restrictions on either the dollar amount of mortgage interest deduction or the number of homes on which the deduction could be claimed. The limits placed on the mortgage interest deduction in 1986 and 1987 were part of the effort to limit the deduction for personal interest.

Under the provisions of TRA86, for home mortgage loans settled on or after August 16, 1986, mortgage interest could be deducted only on a loan amount up to the purchase price of the home, plus any improvements, and on debt secured by the home but used for qualified medical and educational expense. This was an effort to restrict tax-deductible borrowing of home equity in excess of the original purchase price of the home. The interest deduction was also restricted to mortgage debt on a first and second home.

The Omnibus Budget Reconciliation Act of 1987 placed new dollar limits on mortgage debt incurred after October 13, 1987, upon which interest payments could be deducted. An upper limit of $1 million ($500,000 for married filing separately) was placed on the combined "acquisition indebtedness" for a principal and second residence. Acquisition indebtedness includes any debt incurred to buy, build, or substantially improve the residence(s). The ceiling on acquisition indebtedness for any residence is reduced down to zero as the mortgage balance is paid down, and can only be increased if the amount borrowed is used for improvements.

The TRA86 exception for qualified medical and educational expenses was replaced by the explicit provision for home equity indebtedness: in addition to interest on acquisition indebtedness, interest can be deducted on loan amounts up to $100,000 ($50,000 for married filing separately) for other debt secured by a principal or second residence, such as a home equity loan, line of credit, or second mortgage. The sum of the acquisition indebtedness and home equity debt cannot exceed the fair market value of the home(s). There is no restriction on the purposes for which home equity indebtedness can be used.

Mortgage interest is one of several deductions subject to the phaseout on itemized deductions for taxpayers whose AGI exceeds the applicable threshold amount — $156,400 for single taxpayers in 2007, indexed for inflation. (This phaseout was instituted for tax years 1991 through 1995 by the Omnibus Budget Reconciliation Act of 1990 and made permanent by the Omnibus Budget Reconciliation Act of 1993.)

Assessment

Major justifications for the mortgage interest deduction have been the desire to encourage homeownership and to stimulate residential construction. Homeownership is alleged to encourage neighborhood stability, promote civic responsibility, and improve the maintenance of residential buildings. Homeownership is also viewed as a mechanism to encourage families to save and invest in what for many will be their major financial asset.

A major criticism of the mortgage interest deduction has been its distribution of tax benefits in favor of higher-income taxpayers. It is unlikely that a housing subsidy program that gave far larger amounts to high income compared with low income households would be enacted if it were proposed as a direct expenditure program.

The preferential tax treatment of owner-occupied housing relative to other assets is also criticized for encouraging households to invest more in housing and less in other assets that might contribute more to increasing the Nation's productivity and output.

Efforts to limit the deduction of some forms of interest more than others must address the ability of taxpayers to substitute one form of borrowing for another. For those who can make use of it, the home equity interest deduction can substitute for the deductions phased out by TRA86 for consumer interest and investment interest in excess of investment income. This alternative is not available to renters or to homeowners with little equity buildup.

Analysts have pointed out that the rate of homeownership in the United States is not significantly higher than in countries such as Canada that do not provide a mortgage interest deduction under their income tax. The value of the U.S. deduction may be at least partly capitalized into higher prices at the middle and upper end of the housing market.

Selected Bibliography

Bourassa, Steven C. and Grigsby, William G. "Income Tax Concessions for Owner-Occupied Housing," *Housing Policy Debate*, vol. 11, iss. 3, 2000, pp. 521-546.

Brady, Peter, Julie-Anne Cronin, and Houser, Scott. "Regional Differences in the Utilization of the Mortgage Interest Deduction," *Public Finance Review*, vol. 31, (July 2003), pp. 327-366.

Capozza, Dennis R., Richard K. Green, and Patric H. Hendershott. "Taxes, Mortgage Borrowing and Residential Land Prices," in *Economic Effects of Fundamental Tax Reform*, eds. Henry H. Aaron and William G. Gale. Washington, DC: Brookings Institution Press, 1996, pp. 171-210.

Cecchetti, Stephen G. and Peter Rupert. "Mortgage Interest Deductibility and Housing Prices," *Economic Commentary*. Federal Reserve Bank of Cleveland, February 1, 1996.

Chatterjee, Satyjit. "Taxes, Homeownership, and the Allocation of Residential Real Estate Risk," *Business Review*, Federal Reserve Bank of Philadelphia, September-October 1996, pp. 3-10.

Engen, Eric M. and William G. Gale. "Tax-Preferred Assets and Debt, and the Tax Reform Act of 1986: Some Implications for Fundamental Tax Reform," *National Tax Journal*, vol. 49, (September 1996), pp. 331-339.

Follain, James R. and David C. Ling. "The Federal Tax Subsidy to Housing and the Reduced Value of the Mortgage Interest Deduction," *National Tax Journal*, vol. 44, (June 1991), pp. 147-168.

Follain, James R. and Robert M. Dunsley. "The Demand for Mortgage Debt and the Income Tax," *Journal of Housing Research*, vol. 8, no. 2, 1997, pp. 155-191.

Gale, William G. Jonathan Gruber, and Seth Stephens-Davidowitz. "Encouraging Homeownership Through the Tax Code," Tax Notes, v. 115, no. 12. June 18, 2007

Glaeser, Edward L. and Jesse M. Shapiro. "The Benefits of the Home Mortgage Interest Deduction," *NBER Working Paper Series 9284*, National Bureau of Economic Research, October 2002.

Green, Richard K. and Kerry D. Vandell. "Giving Households Credit: How Changes in the U.S. Tax Code Could Promote Homeownership," *Regional Science and Urban Economics*, vol. 29, no. 4, July 1999, pp. 419-444.

Gyourko, Joseph and Todd Sinai. "The Spatial Distribution of Housing-Related Ordinary Income Tax Benefits," *Real Estate Economics*, vol. 31, (Winter 2003), pp. 529-531.

Howard, Christopher. *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States*. Princeton: Princeton Univ. Press, 1997.

Jackson, Pamela J. *Fundamental Tax Reform: Options for the Mortgage Interest Deduction*, Library of Congress, Congressional Research Service Report RL33025, April 26, 2006.

Maki, Dean M. "Portfolio Shuffling and Tax Reform," *National Tax Journal* , vol. 49, (September 1996), pp. 317-329.

Nakagami, Yasuhiro and Alfred M. Pereira. "Budgetary and Efficiency Effects of Housing Taxation in the United States," *Journal of Urban Economics*, vol. 39, (January 1996), pp. 68-86.

Poterba, James and Todd Sinai. "Tax Expenditures for Owner-Occupied Housing: Deductions for Property Taxes and Mortgage Interest and The Exclusion of Imputed Rental Income," *American Economic Review: Papers & Proceedings,* vol. 98, no. 2, 2008, pp. 84-89.

Rose, Clarence C. "The Investment Value of Home Ownership," *Journal of Financial Service Professionals*, vol. 60, (January 2006), pp. 57-66.

Rosen, Harvey S. "Housing Subsidies: Effects on Housing Decisions, Efficiency, and Equity," *Handbook of Public Economics, vol. I*, eds. Alan J. Auerbach and Martin Feldstein. The Netherlands, Elsevier Science Publishers B.V. (North-Holland), 1985, pp. 375-420.

Reschovsky, Andrew and Richard K. Green. Tax Credits and Tenure Choice, *Proceedings, 91st Annual Conference on Taxation, 1998*. Washington, DC: National Tax Association, 1999, pp. 401-410.

Sinai, Todd, and Joseph Gyourko. "The (Un)Changing Geographical Distribution of Housing Tax Benefits: 1980 to 2000," in *Tax Policy and the Economy, 2003 Conference Report*, ed. James Poterba. National Bureau of Economic Research, November 4, 2003.

U.S. Department of Treasury, Internal Revenue Service, Publication 936, *Home Mortgage Interest Deduction*.

DEDUCTION FOR PROPERTY TAXES ON OWNER-OCCUPIED RESIDENCES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	24.6	-	24.6
2009	15.9	-	15.9
2010	13.4	-	13.4
2011	26.6	-	26.6
2012	31.6	-	31.6

Authorization

Section 164.

Description

Taxpayers may claim an itemized deduction for property taxes paid on owner-occupied residences. Taxpayers that do not itemize and pay property taxes may take a deduction in addition to the standard deduction of up to $500 ($250 for single filers). For more on the additional property tax deduction, see the entry titled the "Increased Standard Deduction for Real Property Taxes."

Impact

The deductibility of property taxes on owner-occupied residences provides a subsidy both to home ownership and to the financing of State and local governments. Like the deduction for home mortgage interest, the Federal deduction for real property (real estate) taxes reduces the cost of home ownership relative to renting. Renters may not deduct any portion of

their rent under the Federal income tax. Landlords may deduct the property tax they pay on a rental property but are taxed on the rental income.

Homeowners may deduct the property taxes but are not subject to income tax on the imputed rental value of the dwelling. For itemizing homeowners, the deduction lowers the net price of State and local public services financed by the property tax and raises their after-Federal-tax income.

Like all personal deductions, the property tax deduction provides uneven tax savings per dollar of deduction. The tax savings are higher for those with higher marginal tax rates, and those homeowners who do not itemize deductions receive no direct tax savings.

Higher-income groups are more likely to itemize property taxes and to receive larger average benefits per itemizing return. Consequently, the tax expenditure benefits of the property tax deduction are concentrated in the upper-income groups.

Distribution by Income Class of the Tax Expenditure Amount for Property Taxes, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	0.1
$20 to $30	0.5
$30 to $40	1.5
$40 to $50	2.6
$50 to $75	11.8
$75 to $100	13.8
$100 to $200	47.4
$200 and over	22.3

Rationale

Under the original 1913 Federal income tax law all Federal, State, and local taxes were deductible, except those assessed against local benefits (for improvements which tend to increase the value of the property), for individuals as well as businesses. A major rationale was that tax payments reduce disposable income in a mandatory way and thus should be deducted when determining a taxpayer's ability to pay the Federal income tax.

Over the years, the Congress has gradually eliminated the deductibility of certain taxes under the individual income tax, unless they are business-related. Deductions were eliminated for Federal income taxes in 1917, for estate and gift taxes in 1934, for excise and import taxes in 1943, for State and local excise taxes on cigarettes and alcohol and fees such as drivers' and motor vehicle licenses in 1964, for excise taxes on gasoline and other motor fuels in 1978, and for sales taxes in 1986.

In 2004, sales tax deductibility was reinstated for the 2004 and 2005 tax years by the "American Jobs Creation Act of 2004," (P.L. 108-357). In contrast to pre-1986 law, State sales and use taxes can only be deducted *in lieu of* State income taxes, not in addition to. Taxpayers who itemize and live in States without a personal income tax benefitted the most from the new law. The sales tax deductibility option has been extended twice and is now effective through the 2009 tax year.

State and local taxes are among several deductions subject to the phaseout on itemized deductions for taxpayers whose AGI exceeds the applicable threshold amount — $159,950 for 2008, indexed for inflation. The deduction is reduced by the lesser of three percent of the excess over the threshold amount or 80% of allowable deductions. The phaseout began to gradually phase out itself beginning in the 2006 tax year. For 2008 and 2009, only one-third of reduction will apply and is completely eliminated beginning with the 2010 tax year.

Assessment

Proponents argue that the deduction for State and local taxes is a way of promoting fiscal federalism by helping State and local governments to raise revenues from their own taxpayers. Itemizers receive an offset for their deductible State and local taxes in the form of lower Federal income taxes. Deductibility thus helps to equalize total Federal-State-local tax burdens across the country: itemizers in high-tax States and local jurisdictions pay somewhat lower Federal taxes as a result of their higher deductions, and vice versa.

By allowing property taxes to be deducted in the same way as State and local income, sales, and personal property taxes, the Federal Government avoids interfering in State and local decisions about which of these taxes to rely on. The property tax is particularly important as a source of revenue for local governments and school districts.

Nevertheless, the property tax deduction is not an economically efficient way to provide Federal aid to State and local governments in general, or to target aid on particular needs, compared with direct aid. The deduction works indirectly to increase taxpayers' willingness to support higher State

and local taxes by reducing the net price of those taxes and increasing their income after Federal taxes.

The same tax expenditure subsidy is available to property taxpayers, regardless of whether the money is spent on quasi-private benefits enjoyed by the taxpayers or redistributive public services, or whether they live in exclusive high-income jurisdictions or heterogeneous cities encompassing a low-income population. The property-tax-limitation movements of the 1970s and 1980s, and State and local governments' increased reliance on non-deductible sales and excise taxes and user fees during the 1980s and 1990s, suggest that other forces can outweigh the advantage of the property tax deduction.

Two separate lines of argument are offered by critics to support the case that the deduction for real property taxes should be restricted. One is that a large portion of local property taxes may be paying for services and facilities that are essentially private benefits being provided through the public sector. Similar services often are financed by non-deductible fees and user charges paid to local government authorities or to private community associations (*e.g.*, for water and sewer services or trash removal).

Another argument is that if imputed income from owner-occupied housing is not subject to tax, then associated expenses, such as mortgage interest and property taxes, should not be deductible.

Like the mortgage interest deduction, the value of the property tax deduction may be capitalized to some degree into higher prices for the type of housing bought by taxpayers who can itemize. Consequently, restricting the deduction for property taxes could lower the price of housing purchased by middle- and upper-income taxpayers, at least in the short run.

Selected Bibliography

Aaron, Henry. *Who Pays the Property Tax?* Washington, DC: The Brookings Institution, 1975.

Birch, John W., Mark A. Sunderman, and Brent C. Smith. "Vertical Inequity in Property Taxation: A Neighborhood Based Analysis," *Journal of Real Estate Finance and Economics*, v. 29, n. 1, July 2004, pp. 71-78.

Carroll, Robert J., and John Yinger. "Is the Property Tax a Benefit Tax? The Case of Rental Housing," *National Tax Journal*, v. 47, no. 2, June 1994, pp. 295-316.

Kenyon, Daphne A. "Federal Income Tax Deductibility of State and Local Taxes," *Intergovernmental Perspective*, Fall 1984, v. 10, no. 4, pp. 19-22.

Gale, Willaim G., Jonathan Gruber, and Seth Stephens-Davidowitz. "*Encouraging Homeownership Through the Tax Code*," Tax Notes, June 18, 2007, pp.1171-1189.

Maguire, Steven. *Federal Deductibility of State and Local Taxes*. Library of Congress, Congressional Research Service Report RL32781. Washington, D.C., 2008.

Netzer, Dick. "Local Government Finance and the Economics of Property Tax Exemption," *State Tax Notes*, June 23, 2003, pp. 1053-1069.

Poterba, James, and Todd Sinai. "Tax Expenditures for Owner-Occupied Housing: Deductions for Property Taxes and Mortgage Interest and the Exclusion of Imputed Rental Income," *American Economic Review*, v. 98, no. 2, May 2008, pp. 84-89.

Rosen, Harvey S. "Housing Decisions and the U.S. Income Tax: An Economic Analysis," *Journal of Public Economics*, v. 11, no. 1. February 1979, pp. 1-23.

Tannenwald, Robert. "The Subsidy from State and Local Tax Deductibility: Trends, Methodological Issues and its Value After Federal Tax Reform," Federal Reserve Bank of Boston, Working Paper 97/08, December 1997.

U.S. Congress, Senate Committee on Governmental Affairs, Subcommittee on Intergovernmental Relations. *Limiting State-Local Tax Deductibility in Exchange for Increased General Revenue Sharing: An Analysis of the Economic Effects*, 98th Congress, 1st session, Committee Print S. Prt. 98-77, August 1983. A condensed version was published in Nonna A. Noto and Dennis Zimmerman, "Limiting State-Local Tax Deductibility: Effects Among the States," *National Tax Journal*, v. 37, no. 4, December 1984, pp. 539-549.

U.S. Department of the Treasury, Office of State and Local Finance. *Federal-State-Local Fiscal Relations, Report to the President and the Congress*. Washington, DC: U.S. Government Printing Office, September 1985, pp. 251-283. Also Technical Papers, September 1986, v. 1, pp. 349-552.

Zodrow, George R. "Property Tax Incidence and the Mix of State and Local Finance of Local Expenditures," *State Tax Notes*, May 19, 2008, pp. 567-580.

INCREASED STANDARD DEDUCTION OF REAL PROPERTY TAXES ON OWNER-OCCUPIED RESIDENCES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.9	-	0.9
2009	2.5	-	2.5
2010	0.4	-	0.4
2011	-	-	-
2012	-	-	-

Authorization

Section 63 and section 164.

Description

Taxpayers may claim an itemized deduction for property taxes paid on owner-occupied residences. Taxpayers that do not itemize and pay property taxes may take a deduction in addition to the standard deduction of up to $500 ($250 for single filers). For more on the property tax deduction for itemizers, see the entry titled the "Deduction for Property Taxes on Owner-Occupied Housing."

Impact

The deductibility of property taxes on owner-occupied residences provides a subsidy both to home ownership and to the financing of State and local governments. Like the deduction for home mortgage interest, the Federal deduction for real property (real estate) taxes reduces the cost of home ownership relative to renting. Renters may not deduct any portion of

their rent under the Federal income tax. Landlords may deduct the property tax they pay on a rental property but are taxed on the rental income. Like all personal deductions, the additional property tax deduction provides uneven tax savings per dollar of deduction. The tax savings are higher for those with higher marginal tax rates. Consequently, the tax expenditure benefits of the property tax deduction are concentrated in the upper-income groups.

The additional standard deduction also subsidizes State and local public services financed by the property tax. In almost every State, property taxes are a major source of local government revenue, and thus the federal transfer through deductibility is also quite large. State governments, in contrast, are less dependent upon property tax revenue and instead rely more upon income and sales taxes. According to the U.S. Census Bureau, nationally, property taxes comprised 45.2% ($347.3 billion in FY2006) of all local government general own-source revenue and 1.2% ($11.8 billion in FY2006) of all State government general own-source revenue.

Rationale

Under the original 1913 Federal income tax law all Federal, State, and local taxes were deductible, except those assessed against local benefits (for improvements which tend to increase the value of the property), for individuals as well as businesses. A major rationale was that tax payments reduce disposable income in a mandatory way and thus should be deducted when determining a taxpayer's ability to pay the Federal income tax.

Over the years, the Congress has gradually eliminated the deductibility of certain taxes under the individual income tax, unless they are business-related. Deductions were eliminated for Federal income taxes in 1917, for estate and gift taxes in 1934, for excise and import taxes in 1943, for State and local excise taxes on cigarettes and alcohol and fees such as drivers' and motor vehicle licenses in 1964, for excise taxes on gasoline and other motor fuels in 1978, and for sales taxes in 1986.

In 2004, sales tax deductibility was reinstated for the 2004 and 2005 tax years by the American Jobs Creation Act of 2004 (P.L. 108-357). In contrast to pre-1986 law, State sales and use taxes can only be deducted *in lieu of* State income taxes, not in addition to. Taxpayers who itemize and live in States without a personal income tax benefitted the most from the new law. The sales tax deductibility option has been extended twice and is now effective through the 2009 tax year.

In 2008, the additional standard deduction for property taxes of $500 for joint filers and $250 for single filers was enacted for the 2008 tax year. The provision was included in the Housing and Economic Recovery Act of 2008 (P.L. 110-289), as part of a concerted effort to help provide relief to

homeowners that did not itemize. Thus, the provision, in theory, would treat itemizing and non-itemizing homeowners more equally.

Assessment

A property tax deduction is not an economically efficient way to provide Federal aid to State and local governments in general, or to target aid to individuals, compared with direct aid. The deduction works indirectly to increase taxpayers' willingness to support higher State and local taxes by reducing the net price of those taxes and increasing their income after Federal taxes. The temporary increase of the standard deduction for property taxes paid for homeowners increases equity across homeowners, but not taxpayers more generally.

The same tax expenditure subsidy is available to property taxpayers, regardless of whether the money is spent on quasi-private benefits enjoyed by the taxpayers or redistributive public services, or whether they live in exclusive high-income jurisdictions or heterogeneous cities encompassing a low-income population. The property-tax-limitation movements of the 1970s and 1980s, and State and local governments' increased reliance on non-deductible sales and excise taxes and user fees during the 1980s and 1990s, suggest that other forces can outweigh the advantage of the property tax deduction.

The tax savings from the additional property tax deduction, which will be realized in spring 2009 when taxpayers file 2008 returns, will likely benefit taxpayers that do not have other potentially deductible expenses that are great enough to merit itemizing. Taxpayers with no mortgage (or low mortgage debt) in States with relatively low State and local tax burdens would likely benefit the most from this new tax provision.

Two separate lines of argument are offered by critics to support the case that the deduction for real property taxes should be restricted. One is that a large portion of local property taxes may be paying for services and facilities that are essentially private benefits being provided through the public sector. Similar services often are financed by non-deductible fees and user charges paid to local government authorities or to private community associations (*e.g.*, for water and sewer services or trash removal).

Like the mortgage interest deduction, the value of the property tax deduction may be capitalized to some degree into higher prices for the type of housing bought by taxpayers who can itemize. Consequently, restricting the deduction for property taxes could lower the price of housing purchased by middle- and upper-income taxpayers, at least in the short run.

Selected Bibliography

Aaron, Henry. *Who Pays the Property Tax?* Washington, DC: The Brookings Institution, 1975.

Birch, John W., Mark A. Sunderman, and Brent C. Smith. "Vertical Inequity in Property Taxation: A Neighborhood Based Analysis," *Journal of Real Estate Finance and Economics*, v. 29, n. 1, July 2004, pp. 71-78.

Carroll, Robert J., and John Yinger. "Is the Property Tax a Benefit Tax? The Case of Rental Housing," *National Tax Journal*, v. 47, no. 2, June 1994, pp. 295-316.

Kenyon, Daphne A. "Federal Income Tax Deductibility of State and Local Taxes," *Intergovernmental Perspective*, Fall 1984, v. 10, no. 4, pp. 19-22.

Gale, Willaim G., Jonathan Gruber, and Seth Stephens-Davidowitz. "*Encouraging Homeownership Through the Tax Code*," Tax Notes, June 18, 2007, pp.1171-1189.

Maguire, Steven. *Federal Deductibility of State and Local Taxes*. Library of Congress, Congressional Research Service Report RL32781. Washington, D.C., 2008.

Netzer, Dick. "Local Government Finance and the Economics of Property Tax Exemption," *State Tax Notes*, June 23, 2003, pp. 1053-1069.

Proterba, James, and Todd Sinai. "Tax Expenditures for Owner-Occupied Housing: Deductions for Property Taxes and Mortgage Interest and the Exclusion of Imputed Rental Income," *American Economic Review*, v. 98, no. 2, May 2008, pp. 84-89.

Rosen, Harvey S. "Housing Decisions and the U.S. Income Tax: An Economic Analysis," *Journal of Public Economics*, v. 11, no. 1. February 1979, pp. 1-23.

Tannenwald, Robert. "The Subsidy from State and Local Tax Deductibility: Trends, Methodological Issues and its Value After Federal Tax Reform," Federal Reserve Bank of Boston, Working Paper 97/08, December 1997.

U.S. Congress, Senate Committee on Governmental Affairs, Subcommittee on Intergovernmental Relations. *Limiting State-Local Tax Deductibility in Exchange for Increased General Revenue Sharing: An Analysis of the Economic Effects*, 98th Congress, 1st session, Committee Print S. Prt. 98-77, August 1983. A condensed version was published in Nonna A. Noto and Dennis Zimmerman, "Limiting State-Local Tax Deductibility: Effects Among the States," *National Tax Journal*, v. 37, no. 4, December 1984, pp. 539-549.

U.S. Department of the Treasury, Office of State and Local Finance. *Federal-State-Local Fiscal Relations, Report to the President and the Congress*. Washington, DC: U.S. Government Printing Office, September 1985, pp. 251-283. Also Technical Papers, September 1986, v. 1, pp. 349-552.

Zodrow, George R. "Property Tax Incidence and the Mix of State and Local Finance of Local Expenditures," *State Tax Notes*, May 19, 2008, pp. 567-580.

DEDUCTION FOR PREMIUMS FOR QUALIFIED MORTGAGE INSURANCE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	-	([1])
2009	0.1	-	0.1
2010	0.2	-	0.2
2011	0.2	-	0.2
2012	-	-	-

([1])Less than $50 million.

Authorization

Section 163.

Description

Qualified mortgage insurance premiums paid with respect to a qualified residence can be treated as residence interest and is therefore tax deductible. The deduction is phased out for taxpayers with adjusted gross income from $100,000 to $110,000. For the purposes of this deduction, qualified mortgage insurance means mortgage insurance obtained from the Veterans Administration (VA), the Federal Housing Authority (FHA), the Rural Housing Administration (RHA), and private mortgage insurance as defined by the Homeowners Protection Act of 1988.

Impact

For a number of reasons, the mortgage insurance premium deduction primarily benefits young middle-income households. First, most lenders require mortgage insurance if a borrower's down payment is less than 20 percent. Young households are more likely to lack the wealth needed to meet this requirement and will therefore purchase mortgage insurance. Second, the deduction is only beneficial to households that itemize. Lower-income households do not itemize as they find the standard deduction to be more valuable. Finally, while higher-income households are likely to itemize, income eligibility limits exclude higher-income households from benefitting from this additional deduction.

As with any deduction, a dollar of mortgage insurance premium deduction is worth more the higher the taxpayer's marginal tax rate. Thus, within the group of middle-income households that are eligible for this deduction, higher income earners will find it more beneficial.

Rationale

The deduction was added, for 2007, by the Tax Relief and Health Care Act of 2006 (P.L. 109-432) and extended through 2010 by the Mortgage Forgiveness Debt Relief Act of 2007 (P.L. 110-142). Proponents believe that allowing for the deduction of mortgage insurance premiums fosters home ownership. Most lenders will demand that a household purchase mortgage insurance if a down payment of less than 20 percent is made. By reducing the cost associated with the purchase of such insurance, more households — particularly younger middle-income households unable to meet the 20 percent down payment criteria — may be incentivized into homeownership.

Assessment

A justification for the mortgage insurance premium deduction has been the desire to encourage homeownership. Homeownership is believed to encourage neighborhood stability, promote civic responsibility, and improve the maintenance of residential buildings. Homeownership is also viewed as a mechanism to encourage families to save and invest in what for many will be their major asset.

Economists have noted that owner-occupied housing in the United States is already heavily subsidized. By increasing the subsidy resources are likely further directed away from other uses in the economy, such as investment in productive physical capital.

Selected Bibliography

Gale, William G., Jonathan Gruber, and Seth Stephens-Davidowitz. "Encouraging Homeownership Through the Tax Code," *Tax Notes*, v. 115, no. 12. June 18, 2007

Jackson, Pamela. *Certain Temporary Tax Provisions ("Extenders") Expired in 2007.* Library of Congress, Congressional Research Service Report RL32367. October, 8 2008.

——. *Fundamental Tax Reform: Options for the Mortgage Interest Deduction* . Library of Congress, Congressional Research Service Report RL33025. January 8, 2008

Poterba, James, and Todd Sinai. "Tax Expenditures for Owner-Occupied Housing: Deductions for Property Taxes and Mortgage Interest and The Exclusion of Imputed Rental Income," *American Economic Review: Papers & Proceedings,* vol. 98, no. 2, 2008, pp. 84-89.

Rosen, Harvey S. "Housing Subsidies: Effects on Housing Decisions, Efficiency, and Equity," *Handbook of Public Economics, vol. I*, eds. Alan J. Auerbach and Martin Feldstein. The Netherlands, Elsevier Science Publishers B.V. (North-Holland), 1985, pp. 375-420

EXCLUSION OF CAPITAL GAINS ON SALES OF PRINCIPAL RESIDENCES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	16.8	-	16.8
2009	15.8	-	15.8
2010	16.9	-	16.9
2011	19.3	-	19.3
2012	20.9	-	20.9

Authorization

Section 121.

Description

A taxpayer may exclude from federal income tax up to $250,000 of capital gain ($500,000 in the case of married taxpayers filing joint returns) from the sale or exchange of their principal residence. To qualify the taxpayer must have owned and occupied the residence for at least two of the previous five years. The exclusion is limited to one sale every two years. Special rules apply in the case of sales necessitated by changes in employment, health, and other circumstances.

Impact

Excluding the capital gains on the sale of principal residences from tax primarily benefits middle- and upper-income taxpayers. At the same time, however, this provision avoids putting an additional tax burden on taxpayers, regardless of their income levels, who have to sell their homes because of changes in family status, employment, or health. It also provides tax benefits

to elderly taxpayers who sell their homes and move to less expensive housing during their retirement years. This provision simplifies income tax administration and record keeping.

Rationale

Capital gains arising from the sale of a taxpayer's principal residence have long received preferential tax treatment. The Revenue Act of 1951 introduced the concept of deferring the tax on the capital gain from the sale of a principal residence if the proceeds of the sale were used to buy another residence of equal or greater value. This deferral principal was supplemented in 1964 by the introduction of the tax provision that allowed elderly taxpayers a one-time exclusion from tax for some of the capital gain derived from the sale of their principal residence. Over time, the one-time exclusion provision was modified such that all taxpayers aged 55 and older were allowed a one-time exclusion for up to $125,000 gain from the sale of their principal residence.

By 1997, Congress had concluded that these two provisions, tax free rollovers and the one-time exclusion of $125,000 in gain for elderly taxpayers, had created significant complexities for the average taxpayer with regard to the sale of their principal residence. To comply with tax regulations, taxpayers had to keep detailed records of the financial expenditures associated with their home ownership. Taxpayers had to differentiate between those expenditures that affected the basis of the property and those that were merely for maintenance or repairs. In many instances these records had to be kept for decades.

In addition to record keeping problems, Congress believed that the prior law rules promoted an inefficient use of taxpayers' resources. Because deferral of tax required the purchase of a new residence of equal or greater value, prior law may have encouraged taxpayers to purchase more expensive homes than they otherwise would have.

Finally, Congress believed that prior law may have discouraged some elderly taxpayers from selling their homes to avoid possible tax consequences. Elderly taxpayers who had already used their one-time exclusion and those who might have realized a gain in excess of $125,000, may have held on to their homes longer than they otherwise would have.

As a result of these concerns, Congress repealed the rollover provisions and the one-time exclusion of $125,000 of gain in the Taxpayer Relief Act of 1997. In their place, Congress enacted the current tax rules which allow a taxpayer to exclude from federal income tax up to $250,000 of capital gain ($500,000 in the case of married taxpayers filing joint returns) from the sale or exchange of their principal residence.

Assessment

This exclusion from income taxation gives homeownership a competitive advantage over other types of investments, since the capital gains from investments in other assets are generally taxed when the assets are sold. Moreover, when combined with other provisions in the tax code such as the deductibility of home mortgage interest, homeownership is an especially attractive investment. As a result, savings are diverted out of other forms of investment and into housing.

Viewed from another perspective, many see the exclusion on the sale of a principal residence as justifiable because the tax law does not allow the deduction of personal capital losses, because much of the profit from the sale of a personal residence can represent only inflationary gains, and because the purchase of a principal residence is less of a profit-motivated decision than other types of investments. Taxing the gain on the sale of a principal residence might also interfere with labor mobility.

Selected Bibliography

Cunningham, Christopher R. and Gary V. Engelhardt. "Housing Capital-Gain Taxation and Homeowner Mobility: Evidence from the Taxpayer Relief Act of 1997," *Journal of Urban Economics*, v. 63, no. 3, May 2008, pp. 803-815.

Gravelle, Jane and Pamela J. Jackson. *The Exclusion of Capital Gains for Owner Occupied Housing*. Library of Congress, Congressional Research Service Report RL32978. Washington DC: 2007.

Esenwein, Gregg A. *Individual Capital Gains Income: Legislative History*. Library of Congress, Congressional Research Service Report 98-473E. Washington DC: 2006.

Fox, John O., *If Americans Really Understood the Income Tax*. Boulder, Colorado: Westview Press, 2001, pp. 177- 200.

Burman, Leonard E., Sally Wallace, and David Weiner, "How Capital Gains Taxes Distort Homeowners' Decisions," Proceedings of the 89th Annual Conference, 1996, Washington, DC: National Tax Association, 1997.

U.S. Department of the Treasury, Internal Revenue Service, *Selling Your Home,* Publication 523, 2005.

U.S. Congress, Joint Committee on Taxation. *Description of Revenue Provisions Contained in the President's Fiscal Year 2001 Budget Proposal.* March 6, 2000.

—. *General Explanation of Tax Legislation Enacted in 1997.* December 17, 1997.

U.S. Congress, Congressional Budget Office. *Perspectives on the Ownership of Capital Assets and the Realization of Capital Gains*. May 1997.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT BONDS FOR OWNER-OCCUPIED HOUSING

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.9	0.4	1.3
2009	0.9	0.4	1.3
2010	1.0	0.4	1.4
2011	1.1	0.4	1.5
2012	1.2	0.5	1.7

Authorization

Sections 103, 141, 143, and 146 of the Internal Revenue Code of 1986.

Description

Interest income on State and local bonds issued to provide mortgages at below-market interest rates on owner-occupied principal residences of first-time homebuyers is tax exempt. The issuer of mortgage bonds typically uses bond proceeds to purchase mortgages made by a private lender. The homeowners make their monthly payments to the private lender, which passes them through as payments to the bondholders.

These mortgage revenue bonds (MRBs) are classified as private-activity bonds rather than governmental bonds because a substantial portion of their benefits accrues to individuals or business rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Numerous limitations have been imposed on State and local MRB programs, among them restrictions on the purchase prices of the houses that can be financed, on the income of the homebuyers, and on the portion of the bond proceeds that must be expended for mortgages in targeted (lower income) areas.

A portion of capital gains on an MRB-financed home sold within ten years must be rebated to the Treasury. Housing agencies may trade in bond authority for authority to issue equivalent amounts of mortgage credit certificates (MCCs). MCCs take the form of nonrefundable tax credits for interest paid on qualifying home mortgages.

MRBs are subject to the private-activity bond annual volume cap that is equal to the greater of $80 per State resident or $246.6 million in 2006. The cap has been adjusted for inflation since 2003. Housing agencies must compete for cap allocations with bond proposals for all other private-activities subject to the volume cap.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to offer mortgages on owner-occupied housing at reduced mortgage interest rates.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and homeowners, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

The first MRBs were issued without any Federal restrictions during the high-interest-rate period of the late 1970s. State and local officials expected reduced mortgage interest rates to increase the incidence of homeownership. The Mortgage Subsidy Bond Tax Act of 1980 imposed several targeting requirements, most importantly restricting the use of MRBs to lower-income first-time purchasers. The annual volume of bonds issued by governmental units within a State was capped, and the amount of arbitrage profits (the difference between the interest rate on the bonds and the higher mortgage rate charged to the home purchaser) was limited to one percentage point.

Depending upon the state of the housing market, targeting restrictions have been relaxed and tightened over the decade of the 1980s. MRBs were

included under the unified volume cap on private-activity bonds by the Tax Reform Act of 1986.

MRBs had long been an "expiring tax provision" with a sunset date. MRBs first were scheduled to sunset on December 31, 1983, by the Mortgage Subsidy Bond Tax Act of 1980. Additional sunset dates have been adopted five times when Congress has decided to extend MRB eligibility for a temporary period. The Omnibus Budget Reconciliation Act of 1993 made MRBs a permanent provision.

The Tax Increase Prevention and Reconciliation Act required that payors of State and municipal bond tax-exempt interest begin to report those payments to the Internal Revenue Service after December 31, 2005. The manner of reporting is similar to reporting requirements for interest paid on taxable obligations. Additionally in the 109th Congress, the program was expanded temporarily to assist in the rebuilding efforts after the Gulf Region hurricanes of the Fall of 2005.

In the 110th Congress, the Housing and Economic Recovery Act of 2008, P.L. 110-289 enacted several permanent and temporary changes to the program. First, the interest on MRBs became permanently exempt from the alternative minimum tax. Second, eligible MRBs use was temporarily expanded to include the refinancing of qualified subprime mortgages. Third, States' volume caps were increased for 2008. Fourth, changes enacted in the 109th Congress to assist victims of the Gulf Region hurricanes were extended. Also in the 110th Congress, the Emergency Economic Stabilization Act of 2008, P.L. 110-343 waived certain program requirements, enabling disaster victims to benefit from MRB financing.

Assessment

Income, tenure status, and house-price-targeting provisions imposed on MRBs make them more likely to achieve the goal of increased homeownership than many other housing tax subsidies that make no targeting effort, such as is the case for the mortgage-interest deduction. Nonetheless, it has been suggested that most of the mortgage revenue bond subsidy goes to families that would have been homeowners even if the subsidy were not available.

Even if a case can be made for this federal subsidy for homeownership, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, MRBs increase the financing cost of bonds issued for other public capital. With a greater supply of public bonds, the interest rate on the bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds increases the assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Cooperstein, Richard L. "Economic Policy Analysis of Mortgage Revenue Bonds." In *Mortgage Revenue Bonds: Housing Markets, Home Buyers and Public Policy*, edited by Danny W. Durning, Boston, MA: Kluwer Academic Publishers, 1992.

—. "The Economics of Mortgage Revenue Bonds: A Still Small Voice." In *Mortgage Revenue Bonds: Housing Markets, Home Buyers and Public Policy*, edited by Danny W. Durning, Boston, MA: Kluwer Academic Publishers, 1992.

Keightley, Mark P. and Erika Lunder. *Mortgage Revenue Bonds: Analysis of Sections 3021 and 3022 of the Housing and Economic Recovery Act of 2008*. Library of Congress, Congressional Research Service Report RS22841. September 15, 2008.

MacRae, Duncan, David Rosenbaum, and John Tuccillo. *Mortgage Revenue Bonds and Metropolitan Housing Markets*. Washington, DC: The Urban Institute, May 1980.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 27, 2008.

—. *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 26, 2008.

Temple, Judy. "Limitations on State and Local Government Borrowing for Private Purposes," *National Tax Journal*, v. 46, March 1993, pp. 41-52.

U.S. General Accounting Office. *Home Ownership: Mortgage Bonds Are Costly and Provide Little Assistance to Those in Need*. GAO/RCED-88-111. 1988.

Wrightson, Margaret T. *Who Benefits from Single-Family Housing Bonds? History, Development and Current Experience of State-Administered Mortgage Revenue Bond Programs*. Washington, DC: Georgetown University, Public Policy Program, April 1988.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT BONDS FOR RENTAL HOUSING

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.6	0.2	0.8
2009	0.6	0.2	0.8
2010	0.6	0.2	0.8
2011	0.7	0.3	1.0
2012	0.7	0.3	1.0

Authorization

Sections 103, 141, 142, and 146 of the Internal Revenue Code of 1986.

Description

Interest income on State and local bonds used to finance the construction of multifamily residential rental housing units for low- and moderate-income families is tax exempt. These rental housing bonds are classified as private-activity bonds rather than as governmental bonds because a substantial portion of their benefits accrues to individuals or business, rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

These residential rental housing bonds are subject to the State private-activity bond annual volume cap that is equal to the greater of $80 per State resident or $246.6 million in 2006. The cap has been adjusted for inflation since 2003. Several additional requirements have been imposed on these projects, primarily on the share of the rental units that must be occupied by

low-income families and the length of time over which the income restriction must be satisfied.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to offer residential rental housing units at reduced rates. Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and renters, and for estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Before 1968, State and local governments were allowed to issue tax-exempt bonds to finance multifamily rental housing without restriction. The Revenue and Expenditure Control Act of 1968 (RECA 1968) imposed tests that restricted the issuance of these bonds. However, the Act also provided a specific exception which allowed unrestricted issuance for multifamily rental housing.

Most States issue these bonds in conjunction with the Leased Housing Program under Section 8 of the United States Housing Act of 1937. The Tax Reform Act of 1986 restricted eligibility for tax-exempt financing to projects satisfying one of two income-targeting requirements: 40 percent or more of the units must be occupied by tenants whose incomes are 60 percent or less of the area median gross income, or 20 percent or more of the units are occupied by tenants whose incomes are 50 percent or less of the area median gross income. The Tax Reform Act of 1986 subjected these bonds to the State volume cap on private-activity bonds.

The Tax Increase Prevention and Reconciliation Act required that payors of State and municipal bond tax-exempt interest begin to report those payments to the Internal Revenue Service after December 31, 2005. The manner of reporting is similar to reporting requirements for interest paid on taxable obligations. Additionally in the 109th Congress, the program was expanded temporarily to assist in the rebuilding efforts after the Gulf Region hurricanes of the Fall of 2005.

Most recently, the Housing and Economic Recovery Act of 2008, P.L. 110-289, coordinated certain rules pertaining to the low-income housing tax credit program and the tax exempt rental program when a project received both sources of financing. In addition, a hold-harmless policy for computing

area median income limits was enacted to ensure that the annual income limits in a given year do not fall below the limits in the previous year.

Assessment

This exception was provided because it was believed that subsidized housing for low- and moderate-income families provided benefits to the Nation, and provided equitable treatment for families unable to take advantage of the substantial tax incentives available to those able to invest in owner-occupied housing.

Even if a case can be made for a federal subsidy for multifamily rental housing due to underinvestment at the State and local level, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, those issued for multifamily rental housing increase the financing cost of bonds issued for other public capital. With a greater supply of public bonds, the interest rate on the bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds increases the assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 27, 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 26, 2008.

U.S. Government Accountability Office. *Information on Selected Capital Facilities Related to the Essential Governmental Function Test*. GAO-06-1082. 2006.

U.S. Congress, Congressional Budget Office. *Tax-Exempt Bonds for Multi-Family Residential Rental Property*, 99th Congress, 1st session. June 21, 1985.

— , Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Tax Reform Act of 1986*. May 4, 1987: 1171-1175.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

FIRST-TIME HOMEBUYER TAX CREDIT

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.3	-	0.3
2009	13.6	-	13.6
2010	-0.5	-	-0.5
2011	-1.9	-	-1.9
2012	-1.7	-	-1.7

Authorization

Section 36.

Description

The First-Time Homebuyer Tax Credit allows a refundable credit against federal taxes of up to $7,500 for the first-time purchase of a principal residence. The credit must be repaid interest free over a 15 year period beginning in the second taxable year after a home purchase. The credit applies to both individuals and married couples filing jointly. The credit is phased out for individuals earning from $75,000 to $95,000 and for joint filers earning from $150,000 to $170,000. A homebuyer who is eligible for the Tax Credit for First-Time Homebuyers in the District of Columbia may not claim the more general tax credit. The credit is available only once for homebuyers who acquired title to a qualifying principal residence after April 8, 2008 and before July 1, 2009.

Impact

The First-Time Homebuyer Tax Credit transfersfederal revenue to qualified first-time homebuyers. Those selling homes to tax credit recipients may receive little to no indirect transfer due to their inability to raise prices in the current market.

The distributional impact is dependent on the buyer's regional housing market. In relatively expensive markets, the primary beneficiaries of this credit are more likely better off financially — they have the resources to purchase a home in a relatively expensive market — than the average federal taxpayer. In relatively inexpensive markets the primary beneficiaries of this tax credit are likely to be those more closely resembling the average federal taxpayer. A taxpayer must still have the resources to purchase a home, although in a smaller amount as compared to a more expensive housing market.

Rationale

The First-Time Homebuyer Tax Credit is intended to address two housing market concerns: an excess inventory (supply) of housing on the market and falling home prices. Created by the Housing and Economic Recovery Act of 2008 (P.L. 110-289), the tax credit provides an incentive for current renters to purchase a home. By increasing the demand for owner-occupied housing, proponents believe that the tax credit may help to reduce the supply of unsold homes and stabilize home prices.

This provision expires on July 1, 2009.

Assessment

As mentioned above, this tax credit is intended to encourage the first-time purchase of homes, and, as a result, stabilize prices by decreasing the inventory of unsold homes on the market. The effectiveness of the tax credit thus depends upon how many marginal or additional homebuyers are induced into buying homes. The credit could be quite successful if a large number of households that would have otherwise remained renters without the tax credit become home owners. On the other hand, the credit may have a minimal effect on home prices and the home inventory if it is only claimed by households that would have purchased a home even without the credit.

While too little time has passed since the enactment of the first-time homebuyer tax credit to definitively study the tax credit's impact, economic theory suggests that the credit may not be very effective at stimulating home demand. Empirical studies have found lack of liquid wealth to be the principal barrier to homeownership for first-time homebuyers. Young

households — the pool of renters from which most first-time buyers come — are particularly constrained as they have had a shorter period of time to accumulate the assets needed for a down payment and/or closing costs. The tax credit provides wealth constrained households little relief as it may not be claimed until after the purchase of a home.

Even if the credit could be used for a down payment the repayment requirement greatly reduces the credit's economic value. The credit is most valuable to buyers that expect to remain in their first home for the entire repayment period. For such households the economic value of the first-time homebuyer tax credit is still less than half the credit's face value (maximum $7,500). Most first-time homebuyers, however, do not expect to remain in their first home for the entire repayment period, reducing the value of the credit even more. Essentially, buyers that plan to move before the end of the official repayment period are unable to take full advantage of the interest free loan aspect of the tax credit.

Selected Bibliography

Fallis, George. *Housing Economics*. Toronto: Butterworths, 1985.

Goodman, Allen C. "An Econometric Model of Housing Price, Permanent Income, Tenure Choice and Housing Demand," *Journal of Urban Economics*, v. 23, no. 3, 1988.

Green, Richard K, Stephen Malpezzi. *A Primer on U.S. Housing Markets and Housing Policy.* Washington, DC: The Urban Institute Press, 2003.

Haurin, Donald R., Patric H. Hendershott, and Susan Wachter. "Borrowing Constraints and the Tenure Choice of Young Households," *Journal of Housing Research,* v. 8, no. 2, 1997.

Linneman, Peter D., and Susan Wachter. "The Impacts of Borrowing Constraints on Homeownership," *Journal of the American Real Estate and Urban Economics Association,* v. 17, no. 4, 1989.

Pettit, Carol A. *The First-Time Homebuyer Tax Credit.* Library of Congress, Congressional Research Service Report RS34664. September 23, 2008.

Rapaport, Carol. "Housing Demand and Community Choice: An Empirical Analysis," *Journal of Urban Economics*, v. 42, no. 2, 1997.

DEPRECIATION OF RENTAL HOUSING IN EXCESS OF ALTERNATIVE DEPRECIATION SYSTEM

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	3.8	0.4	4.2
2009	4.1	0.5	4.6
2010	4.8	0.5	5.3
2011	4.9	0.5	5.4
2012	4.8	0.5	5.3

Authorization

Sections 167 and 168.

Description

Taxpayers are allowed to deduct the costs of acquiring depreciable assets (assets that wear out or become obsolete over a period of years) as depreciation deductions. The tax code currently allows new rental housing to be written off over 27.5 years, using a "straight line" method where equal amounts are deducted in each period. This rule was adopted in 1986. There is also a prescribed 40-year write-off period for rental housing under the alternative minimum tax (also based on a straight-line method).

The tax expenditure measures the revenue loss from current depreciation deductions in excess of the deductions that would have been allowed under this longer 40-year period. The current revenue effects also reflect different write-off methods and lives prior to the 1986 revisions, since many buildings pre-dating that time are still being depreciated.

Prior to 1981, taxpayers were generally offered the choice of using the straight-line method or accelerated methods of depreciation, such as double-declining balance and sum-of-years digits, in which greater amounts are deducted in the early years. (Used buildings with a life of twenty years or more were restricted to 125-percent declining balance methods.) The period of time over which deductions were taken varied with the taxpayer's circumstances.

Beginning in 1981, the tax law prescribed specific write-offs which amounted to accelerated depreciation over periods varying from 15 to 19 years. Since 1986, all depreciation on residential buildings has been on a straight-line basis over 27.5 years.

Example: Suppose a building with a basis of $10,000 was subject to depreciation over 27.5 years. Depreciation allowances would be constant at 1/27.5 x $10,000 = $364. For a 40-year life the write-off would be $250 per year. The tax expenditure in the first year would be measured as the difference between the tax savings of deducting $364 or $250, or $114.

Impact

Because depreciation methods faster than straight-line allow for larger deductions in the early years of the asset's life and smaller depreciation deductions in the later years, and because shorter useful lives allow quicker recovery, accelerated depreciation results in a deferral of tax liability.

It is a tax expenditure to the extent it is faster than economic (*i.e.*, actual) depreciation, and evidence indicates that the economic decline rate for residential buildings is much slower than that reflected in tax depreciation methods.

The direct benefits of accelerated depreciation accrue to owners of rental housing. Benefits to capital income tend to concentrate in the higher-income classes (see discussion in the Introduction).

Rationale

Prior to 1954, depreciation policy had developed through administrative practices and rulings. The straight-line method was favored by IRS and generally used. Tax lives were recommended for assets through "Bulletin F," but taxpayers were also able to use a facts-and-circumstances justification.

A ruling issued in 1946 authorized the use of the 150-percent declining balance method. Authorization for it and other accelerated depreciation methods first appeared in legislation in 1954 when the double declining

balance and other methods were enacted. The discussion at that time focused primarily on whether the value of machinery and equipment declined faster in their earlier years. However, when the accelerated methods were adopted, real property was included as well.

By the 1960s, most commentators agreed that accelerated depreciation resulted in excessive allowances for buildings. The first restriction on depreciation was to curtail the benefits that arose from combining accelerated depreciation with lower capital gains taxes when the building was sold. That is, while taking large deductions reduced the basis of the asset for measuring capital gains, these gains were taxed at the lower capital gains rate rather than the ordinary tax rate.

In 1964, 1969, and 1976 various provisions to "recapture" accelerated depreciation as ordinary income in varying amounts when a building was sold were enacted.

In 1969, depreciation on used rental housing was restricted to 125 percent declining balance depreciation. Low-income housing was exempt from these restrictions.

In the Economic Recovery Tax Act of 1981, residential buildings were assigned specific write-off periods that were roughly equivalent to 175-percent declining balance methods (200 percent for low-income housing) over a 15-year period under the Accelerated Cost Recovery System (ACRS).

These changes were intended as a general stimulus to investment. Taxpayers could elect to use the straight-line method over 15 years, 35 years, or 45 years. (The Deficit Reduction Act of 1984 increased the 15-year life to 18 years; in 1985, it was increased to 19 years.) The recapture provisions would not apply if straight-line methods were originally chosen. The acceleration of depreciation that results from using the shorter recovery period under ACRS was not subject to recapture as accelerated depreciation.

The current treatment was adopted as part of the Tax Reform Act of 1986, which lowered tax rates and broadened the base of the income tax.

Assessment

Evidence suggests that the rate of economic decline of residential structures is much slower than the rates allowed under current law, and this provision causes a lower effective tax rate on such investments than would otherwise be the case. This treatment in turn tends to increase investment in rental housing relative to other assets, although there is considerable debate about how responsive these investments are to tax subsidies.

At the same time, the more rapid depreciation roughly offsets the understatement of depreciation due to the use of historical cost-basis depreciation, assuming inflation is at a rate of two percent or so. Moreover, many other assets are eligible for accelerated depreciation as well, and the allocation of capital depends on relative treatment.

Much of the previous concern about the role of accelerated depreciation in encouraging tax shelters in rental housing has faded because the current depreciation provisions are less rapid than those previously in place, and because there is a restriction on the deduction of passive losses. (However, the restrictions were eased somewhat in 1993.)

Selected Bibliography

Auerbach, Alan, and Kevin Hassett. "Investment, Tax Policy, and the Tax Reform Act of 1986," *Do Taxes Matter: The Impact of the Tax Reform Act of 1986*, ed. Joel Slemrod. Cambridge, Mass.: MIT Press, 1990, pp. 13-49.

Board of Governors of the Federal Reserve System. *Public Policy and Capital Formation*. April 1981.

Brannon, Gerard M. "The Effects of Tax Incentives for Business Investment: A Survey of the Economic Evidence," *The Economics of Federal Subsidy Programs, Part 3: Tax Subsidies*, U.S. Congress, Joint Economic Committee, July 15, 1972, pp. 245-268.

Brazell, David W. and James B. Mackie III. "Depreciation Lives and Methods: Current Issues in the U.S. Capital Cost Recovery System," *National Tax Journal*, v. 53 (September 2000), pp. 531-562.

Break, George F. "The Incidence and Economic Effects of Taxation," *The Economics of Public Finance*. Washington, DC: The Brookings Institution, 1974.

Bruesseman, William B., Jeffrey D. Fisher and Jerrold J. Stern. "Rental Housing and the Economic Recovery Tax Act of 1981," *Public Finance Quarterly*, v. 10. April 1982, pp. 222-241.

Burman, Leonard E., Thomas S. Neubig, and D. Gordon Wilson. "The Use and Abuse of Rental Project Models," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 307-349.

DeLeeuw, Frank, and Larry Ozanne. "Housing," In *How Taxes Affect Economic Behavior*, eds. Henry J. Aaron and Joseph A. Pechman. Washington, DC: The Brookings Institution, 1981, pp. 283-326.

Deloitte and Touche. *Analysis of the Economic Depreciation of Structure*, Washington, DC: June 2000.

Feldstein, Martin. "Adjusting Depreciation in an Inflationary Economy: Indexing Versus Acceleration." *National Tax Journal*, v. 34. March 1981, pp. 29-43.

Follain, James R., Patric H. Hendershott, and David C. Ling. "Real Estate Markets Since 1980: What Role Have Tax Changes Played?", *National Tax Journal,* v. 45, September 1992, pp. 253-266.

Fromm, Gary, ed. *Tax Incentives and Capital Spending*. Washington, DC: The Brookings Institution, 1971.

Fullerton, Don, Robert Gillette, and James Mackie. "Investment Incentives Under the Tax Reform Act of 1986," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 131-172.

Fullerton, Don, Yolanda K. Henderson, and James Mackie. "Investment Allocation and Growth Under the Tax Reform Act of 1986," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 173-202.

Gravelle, Jane G. "Differential Taxation of Capital Income: Another Look at the Tax Reform Act of 1986," *National Tax Journal*, v. 63. December 1989, pp. 441-464.

— . *Depreciation and the Tax Treatment of Real Estate*. Library of Congress, Congressional Research Service Report RL30163. Washington, DC: October 25, 2000.

— . *Economic Effects of Taxing Capital Income*, Chapters 3 and 5. Cambridge, MA: MIT Press, 1994.

— . "Whither Tax Depreciation?" *National Tax Journal*, vol. 54, September, 2001, pp. 513-526.

Harberger, Arnold. "Tax Neutrality in Investment Incentives," *The Economics of Taxation,* eds. Henry J. Aaron and Michael J. Boskin. Washington, DC: The Brookings Institution, 1980, pp. 299-313.

Hulten, Charles, ed. *Depreciation, Inflation, and the Taxation of Income From Capital*. Washington, DC: The Urban Institute, 1981.

Hulten, Charles R., and Frank C. Wykoff. "Issues in Depreciation Measurement." *Economic Inquiry*, v. 34, January 1996, pp. 10-23.

Jorgenson, Dale W. "Empirical Studies of Depreciaton." *Economic Inquiry*, v. 34, January 1996, pp. 24-42.

Mackie, James. "Capital Cost Recovery," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Nadiri, M. Ishaq, and Ingmar R. Prucha. "Depreciation Rate Estimation of Physical and R&D Capital." *Economic Inquiry*, v. 34, January 1996, pp. 43-56.

Poterba, James M. "Taxation and Housing Markets: Preliminary Evidence on the Effects of Recent Tax Reforms," *Do Taxes Matter: The Impact of the Tax Reform Act of 1986,* ed. Joel Slemrod. Cambridge, Mass: The MIT Press, 1990, pp. 13-49.

Surrey, Stanley S. *Pathways to Tax Reform.* Chapter VII: "Three Special Tax Expenditure Items: Support to State and Local Governments, to Philanthropy, and to Housing." Cambridge, Mass: Harvard University Press, 1973.

Taubman, Paul and Robert Rasche. "Subsidies, Tax Law, and Real Estate Investment," *The Economics of Federal Subsidy Programs*, Part 3: "Tax Subsidies." U.S. Congress, Joint Economic Committee, July 15, 1972, pp. 343-369.

U.S. Congress, Congressional Budget Office. *Real Estate Tax Shelter Subsidies and Direct Subsidy Alternatives.* May 1977.

— , Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986*. May 4, 1987, pp. 89-110.

U.S. Department of Treasury. *Report to the Congress on Depreciation Recovery Periods and Methods*. Washington, DC: June 2000.

TAX CREDIT FOR LOW-INCOME HOUSING

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.6	4.8	5.4
2009	0.6	5.1	5.7
2010	0.7	5.5	6.2
2011	0.7	5.9	6.6
2012	0.7	6.3	7.0

Authorization

Section 42.

Description

The Low Income Housing Tax Credit (LIHTC) was created by the Tax Reform Act of 1986 (P.L. 99-514), providing a tax credit for a portion of the costs of low-income rental housing. The credit is claimed over a period of 10 years. The credit rate was set originally so that the present value of the tax credit equaled 70 percent for new construction and 30 percent for projects receiving other Federal benefits (such as tax exempt bond financing), or for substantially rehabilitated existing housing. The Housing and Economic Recovery Act of 2008 (P.L. 110-289) temporarily increased the effective subsidy for new construction placed in service through the end of 2013.

The credit is allowed only for the fraction of units serving low-income tenants, which are subject to a maximum rent. To qualify, at least 40 percent of the units in a rental project must be occupied by families with incomes less than 60 percent of the area median or at least 20 percent of the units in a rental project must be occupied by families with incomes less than 50 percent of the area median . (In practice, data show the vast majority of tax credit projects are composed almost entirely of low-income units). Rents in

low-income units are restricted to 30 percent of the 60 percent (or 50 percent) of area median income. An owner's required time commitment to keep units available for low-income use was originally 15 years, but the Omnibus Budget Reconciliation Act of 1989 extended this period to 30 years for projects begun after 1989.

The credits are allocated in a competitive process by State housing agencies to developers, most of whom then sell their 10-year stream of tax credits to investors to raise capital for the project. The original law established an annual per-resident limit of $1.25 for the State's total credit authority. Under the Community Renewal Tax Relief Act of 2000 (P.L 106-554), this limit was increased to $1.50 in 2001, $1.75 in 2002, and thereafter, adjusted for inflation (originally, $2.00 for 2008). There is a minimum annual credit amount for small States, also indexed for inflation, currently about $2.1 million for States where the $1.90 per capita formula would yield less. The Housing and Economic Recovery Act of 2008 temporarily increased the non-small State limit by $0.20, and the small State limit by 10% for 2008 and 2009. The housing authority must require an enforceable 30-year low-income use (through restrictive covenants), although after the initial 15-year period, an owner may sell the project (at a controlled price) or convert it to market-rate housing if the housing authority is unable to find a buyer, often a nonprofit group, willing to maintain the project as low-income use for the remainder of the 30 year period.

The amount of the credit that can be offset against unrelated income is limited to the equivalent of $25,000 in deductions, under the passive loss restriction rules.

Impact

This provision substantially reduces the cost of investing in qualified units. The competitive sale of tax credits by developers to investors and the oversight requirements by housing agencies should prevent excess profits from occurring, and direct much of the benefit to qualified tenants of the housing units.

Most tax credits are now purchased by corporations, including banks who are satisfying their requirements under the Community Reinvestment Act, and by the government-sponsored enterprises, Fannie Mae and Freddie Mac, also satisfying their affordable housing lending goals.

Rationale

The tax credit for low-income housing was adopted in the Tax Reform Act of 1986 to provide a subsidy directly linked to the addition of rental housing with limited rents for low-income households. It replaced less targeted

subsidies in the law, including accelerated depreciation, five-year amortization of rehabilitation expenditures, expensing of construction-period interest and taxes, and general availability of tax-exempt bond financing. The credit was scheduled to expire at the end of 1989, but was temporarily extended a number of times until made permanent by the Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66).

The Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239) required States to regulate tax-credit projects more carefully to insure that investors were not earning excessive rates of return and introduced the requirement that new projects have a long-term plan for providing low-income housing. Legislation in 1988, (the Technical and Miscellaneous Revenue Act of 1988, P.L. 100-647), in 1989 (noted above), and in 1990 (the Omnibus Budget Reconciliation Act of 1990, P.L. 101-508) made technical and substantive changes to the provision. As noted above, the Community Renewal Tax Relief Act of 2000 increased the annual tax credit allocation limit, indexed it to inflation, and made minor amendments to the program.

Recently, the tax credit has been used to assist victims of Hurricane Ike and the severe weather and flooding in the Midwest. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) allowed States to allocate additional credits to affected areas for the years 2009, 2010, and 2011. Similar changes were enacted as part Gulf Opportunity Zone Act of 2005 to assist victims of Hurricanes Katrina, Rita, and Wilma.

Assessment

The low-income housing credit, now giving States the equivalent of nearly $5.5 billion of annual budget authority, is more targeted to benefitting lower-income individuals than the more general tax provisions it replaced. Moreover, by allowing State authorities to direct its use, the credit can be used as part of a general neighborhood revitalization program. The most comprehensive data base of tax credit units, compiled by the Department of Housing and Urban Development (HUD), revised as of January 15, 2008, shows nearly 27,410 projects and nearly 1,530,000 housing units placed in service between 1987 and 2005. With about 100,000 units now being added each year, the current total is likely in excess of 1.8 million units. The HUD data base of units built from 1995 through 2008 shows nearly two-thirds were newly constructed (although only one-third in the Northeast were new construction), slightly less then one-third of the projects had a nonprofit sponsor, nearly one-half of units are located in central cities and about 40 percent are in metro area suburbs. Data also show that LIHTC units are more likely to be located in largely minority- or renter-occupied census tracts or tracts with large proportions of female-headed households, compared to households in general or rental units in general.

Much less is known about the financial aspects of tax credit projects and how much it actually costs to provide an affordable rental unit under this program when all things are considered. Many tax credit projects receive other Federal subsidies, and as noted, more than one-third of tax credit renters receive additional Federal rental assistance. HUD's Federal Housing Administration (FHA) program is insuring an increasing number of tax credit projects. There are reports that some neighborhoods are saturated with tax credit projects and projects targeted to households with 60 percent of area median income frequently have as high a vacancy rate as the surrounding unsubsidized market.

There are a number of criticisms that can be made of the credit (see the Congressional Budget Office study in the bibliography below for a more detailed discussion). The credit is unlikely to have a substantial effect on the total supply of low-income housing, based on both micro-economic analysis and some empirical evidence. There are significant overhead and administrative costs, especially if there are attempts to insure that investors do not earn excess profits. Direct funding by the Federal government to State housing agencies would avoid the cost of the syndication process (the sale of tax credits to investors as "tax shelters.") And, in general, many economists would argue that housing vouchers, or direct-income supplements to the low-income, are more direct and fairer methods of providing assistance to lower-income individuals. However, others argue that because of landlord discrimination against low income people, minorities, and those with young children (and sometimes an unwillingness to get involved in a government program, particularly in tight rental markets), a mix of vouchers and project-based assistance like the tax credit might be necessary.

An issue at the forefront of some economists concerns is the number of completed LIHTC projects that are nearing the end of their 15-year affordability restrictions. A report by the Joint Center for Housing Studies at Harvard University and the Neighborhood Reinvestment Corporation on the expiring affordability issue concluded that : "Lack of monitoring or insufficient funds for property repair or purchase will place even properties for which there is an interest in preserving affordability at risk of market conversion, reduced income-targeting, or disinvestment and decline." An increasing amount of tax credits have been and are likely to be used for the preservation of existing affordable housing in the future rather than for new units that add to the overall supply of affordable units.

Selected Bibliography

Burman, Leonard. "Low Income Housing Credit," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Collignon, Kate. Expiring Affordability of Low-Income Housing Tax Credit Properties: The Next Era in Preservation. Cambridge, MA: *Neighborhood Reinvestment Corporation and Joint Center for Housing Studies of Harvard University,* October 1999.

Cummings, Jean L, and Denise DiPasquale. "The Low-Income Housing Tax Credit: An Analysis of the First Ten Years," *Housing Policy Debate*, v. 10, no. 2, 1999. pp. 251-307.

Deng, Lan. "The Cost-Effectiveness of the Low-Income Housing Tax Credit Relative to Vouchers: Evidence From Six Metropolitan Areas," *Housing Policy Debate,* vol. 16, no. 3/4, 2005, pp. 469-511.

Desai, Mihir A., Monica Singhal, and Dhammika Dharmapala. "Investable Tax Credits: The Case of the Low Income Housing Tax Credit," National Bureau of Economic Research, Working Paper no. 14149, June 2008.

Freeman, Lance. *Siting Affordable Housing: Location and Neighborhood Trends of Low Income Housing Tax Credit Developments in the 1990s*. The Brookings Institution. March 2004.

Gale, William G., Jonathan Gruber, and Seth Stephens-Davidowitz. "Encouraging Homeownership Through the Tax Code," Tax Notes, v. 115, no. 12. June 18, 2007.

Green, Richard K., Stephen Malpezzi, and Kiat-Ying Seah. Low Income Housing Tax Credit Housing Developments And Property Values. *The Center for Urban Land Economics Research*. June 12, 2002.

Herman, Kim, Walter Clare, Susan Herd, Dana Jones, Erica Stewart, and Barbara Burnham. "Tax Credits and Rural Housing," *Voices from the Housing Assistance Council* , Winter 2003-2004.

Keightley, Mark P. *An Introduction to the Design of the Low-Income Housing Tax Credit*, Library of Congress, Congressional Research Service Report RS22389, August 22, 2008.

— , *The Low-Income Housing Tax Credit Program: The Fixed Subsidy and Variable Rate,* Library of Congress, Congressional Research Service Report RS22917, September 16, 2008.

Khadduri, Jill, Larry Buron, and Carissa Climaco. "Are States Using the Low Income Housing Tax Credit to Enable Families with Children to Live in Low poverty and Racially Integrated Neighborhoods?" a report prepared for the *Poverty and Race Research Action Council and the National Fair Housing Alliance*, July 2006.

McClure, Kirk. "The Low-Income Housing Tax Credit Program Goes Mainstream and Moves to the Suburbs," *Housing Policy Debate,* v.17, no. 3, 2006. pp. 419-457.

Olsen, Edgar O. "The Low-Income Housing Tax Credit: An Assessment," working paper from the University of Virginia, December 2004.

Olsen, Edgar O. "Fundamental Housing Policy Reform," working paper from the University of Virginia, January 2006.

Present Realities, Future Prospects: Chicago's Low Income Housing Tax Credit Portfolio. Summary Report 2002. *Chicago Rehab Network*.

Understanding the Dynamics: A Comprehensive Look at Affordable Housing Tax Credit Properties. Ernst & Young's Affordable Housing Services, July, 2002.

United States General Accounting Office. *Costs and Characteristics of Federal Housing Assistance*. GAO-01-901R. July 2001.

House Committee on Ways and Means. *Tax Provisions Related to Housing*. 2004 Green Book. 108th Congress, 2nd session, March 2004, pp. 13-56 to 13-58.

Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986.* May 4, 1987, pp. 152-177.

Schwartz, Alex and Edwin Melendez. "After Year 15: Challenges to the Preservation of Housing Financed with Low-Income Housing Tax Credits,"*Housing Policy Debate*, v. 19, no. 2, 2008. pp. 261-294.

Sinai, Todd, and Joel Waldfogel. "Do Low-Income Housing Subsides Increase The Occupied Housing Stock?," *Journal of Public Economics,* v. 89, no. 11/12, December 2005, pp. 2137-2164.

U.S. Congressional Budget Office, *The Cost-Effectiveness of the Low-Income Housing Tax Credit Compared with Housing Vouchers,* April 1992.

U.S. Department of Housing and Urban Development. *Making the Best Use of Your LIHTC Dollars: A Planning Paper for State Policy Maker*s, July 2004.

— *, Assessment of the Economic and Social Characteristics of LIHTC Residents and Neighborhoods.* Washington, D. C. August 2000.

— , *Updating the Low Income Housing Tax Credit Database: Projects Placed in Service Through 2005.* Washington, D.C. January 2008.

U.S. Department of the Treasury, Comptroller of the Currency, *Low-Income Housing Tax Credits: Affordable Housing Investment Opportunities for Banks,* February 2008.

TAX CREDIT FOR REHABILITATION OF HISTORIC STRUCTURES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	0.3	0.4
2009	0.1	0.3	0.4
2010	0.1	0.3	0.4
2011	0.2	0.4	0.6
2012	0.2	0.4	0.6

Authorization

Section 47.

Description

Expenditures on certified structures qualify for a 20 percent tax credit if used to substantially rehabilitate historic structures for use as residential rental or commercial property. The basis (cost for purposes of depreciation) of the building is reduced by the amount of the rehabilitation credit. The costs of acquiring a building or an interest in such a building, such as a leasehold interest, are not considered as qualifying expenditures. The costs of facilities related to an existing building, such as a parking lot, also are not considered as qualifying expenditures. Expenditures incurred by a lessee do not qualify for the credit unless the remaining lease term on the date the rehabilitation is completed is at least as long as the applicable recovery period under the general depreciation rules (generally, 27.5 years for residential property and 39 years for nonresidential property). Straight-line depreciation must be used to qualify for the rehabilitation credit.

The amount of the credit that can be offset against unrelated income is limited to the equivalent of $25,000 in deductions under the passive loss

restriction rules. The ordering rules for the phaseout are provided in Section 469 of the Internal Revenue Code.

Certified historic structures are either individually registered in the National Register of Historic Places or are structures certified by the Secretary of the Interior as having historic significance and located in a registered historic district. The State Historic Preservation Office reviews applications and forwards recommendations for designation to the U.S. Department of the Interior.

Impact

The credit reduces the taxpayer's cost of preservation projects. Prior to the Tax Reform Act of 1986 (P.L. 99-514), historic preservation projects had become a popular tax shelter with rapid growth. The limits on credits under the passive loss restrictions limit the use of this investment as a tax shelter.

Rationale

Rapid depreciation (amortized over a 60-month period) for capital expenditures incurred in rehabilitation of certified historic structures was adopted as part of the Tax Reform Act of 1976 (P.L. 94-455). In addition, the act provided that in case of a substantially altered or demolished certified historic structure, the amount expended for demolition or any loss sustained on account of the demolition is to be charged to the capital account with respect to the land and not includible in the depreciable basis of a replacement structure. Further, accelerated depreciation methods are prohibited for the replacement structure. These actions were taken because Congress identified the preservation of historic structures and neighborhoods as an important national goal dependent upon the enlistment of private funds in the preservation movement. It was argued that prior law encouraged the demolition and replacement of old buildings instead of their rehabilitation.

Partly in a move toward simplification and partly to add counterbalance to new provisions for accelerated cost recovery, the tax incentives were changed to a tax credit in 1981 and made part of a set of credits for rehabilitating older buildings (varying by type or age).

The credit amount was reduced in 1986 because the rate was deemed too high when compared with the new lower tax rates, and a reduction from a three- to a two-tiered rehabilitation rate credit was adopted. A higher credit rate was allowed for preservation of historic structures than for rehabilitations of older qualified buildings first placed in service prior to 1936.

In response to tax simplification proposals which noted the numerous limitations and qualifications of the loss limitation rules, ordering rules in the Internal Revenue Code (Section 469) were clarified with the passage of the Job Creation and Worker Assistance Act of 2002 (P.L. 107-147).

Temporary expansion of the tax credit amount was enacted with the Gulf Opportunity Zone Act (GO Zone; P.L. 109-135). The expansion, which became effective for expenditures made after August 28, 2005 and before January 1, 2009, applies to certified historic structures located in specific areas of the Gulf Region that were adversely affected by hurricanes in the fall of 2005. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the provision through December 31, 2009.

Assessment

Owners of historic buildings are encouraged to renovate them through the use of the 20 percent tax credit available for substantial rehabilitation expenditures approved by the Department of the Interior. Opponents of the credit note that investments are allocated to historic buildings that would not be profitable projects without the credit, resulting in economic inefficiency. Proponents argue that investors fail to consider external benefits (preservation of social and aesthetic values) which are desirable for society at large.

Selected Bibliography

Alperin, Kenneth A. "What You Should Know About The Historic Rehabilitation Tax Credit," *The Practical Tax Lawyer*, vol. 19, iss. 2, 2005, pp. 31-39.

Escherich, Susan M., Stephen J. Farneth, and Bruce D. Judd; with a preface by Katherine H. Stevenson. "Affordable Housing Through Historic Preservation: Tax Credits and the Secretary of the Interior's Standards for Historic Rehabilitation." Washington, DC: U.S. Dept. of the Interior, National Park Service, Cultural Resources, Preservation Assistance. For sale by the U.S. Government Printing Office, Superintendent of Documents [1995].

Fogleman, Valerie M. "A Capital Tax System to Preserve America's Heritage: A Proposal Based on the British National Heritage Capital Tax System," *Vanderbilt Journal of Transnational Law*, vol. 23, 1990, pp. 1-63.

Foong, Keat. "Historic Tax Credit Use Continues to Rise: Use of Federal Program Can Be Extremely Lucrative, Although Requirements Can Deter Developers," *Multi-Housing News*, vol. 37 (July 2002), pp. 1-4.

Kamerick, Megan. "Framers get a History Lesson: Historic Tax Credits Can Help Framers Secure the Shops of Their Dreams," *Art Business News*, vol. 31, April 2003, p. S1.

Linn, Charles. "PSFS Adaptive Reuse Illustrates Preservation Tax Credits at Work," Architectural Record, vol. 188, October 2000, p. 63.

Listokin, David, Barbara Listokin, and Michael Lahr. "The Contributions of Historic Preservation to Housing and Economic Development," *Housing Policy Debate*, vol. 9, Issue 3, 1998, pp. 431-478.

Mann, Roberta F. "Tax Incentives for Historic Preservation: An Antidote for Sprawl?" Widener Law Symposium Journal, vol. 8, 2002, pp. 207-236.

National Park Service. *Federal Historic Preservation Tax Incentives*. [http://www2.cr.nps.gov/history/hps/tps/tax/brochure1.htm] visited Oct. 29, 2008.

Novogradac, Michael J. and Eric J. Fortenbach. "Financing Rehab Projects with the Rehabilitation Tax Credit," *Journal of Property Management*, vol. 54, September-October 1989, pp. 72-73.

Preservation Tax Incentives for Historic Buildings. Washington, DC: U.S. National Park Service, 1990.

Oliver-Remshefski, Rebecca N. "Washington Slept Here: Protection and Preservation of Our Architectural Heritage," *Rutgers Law Review*, vol. 55, Winter 2003, pp. 611-640.

Smith, Neil. "Comment on David Listokin, Barbara Listokin, and Michael Lahr's *The Contributions of Historic Preservation to Housing and Economic Development: Historic Preservation in a Neoliberal Age*," *Housing Policy Debate*, vol. 9, 1998, pp. 479-485.

Swaim, Richard. "Politics and Policymaking: Tax Credits and Historic Preservation," *Journal of Arts Management, Law, and Society*, vol. 33, Issue 1, Spring 2003, pp. 32-40.

U.S. Congress, Congressional Budget Office. *Budget Options.* "Reduce Tax Credits for Rehabilitating Buildings and Repeal the Credit for Nonhistoric Structures." Washington, DC: February 2001, p. 427.

U.S. General Accounting Office. *Historic Preservation Tax Incentives.* Washington, DC: GAO, August 1, 1986.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Act of 1978 (H.R. 13511, 95th Congress; Public Law 95-600).* Washington, DC: U.S. Government Printing Office, March 12, 197, pp. 155-158.

— . *General Explanation of the Economic Recovery Tax Act of 1981 (H.R. 4242, 97th Congress; Public Law 97-34).* Washington, DC: U.S. Government Printing Office, December 31, 1981, pp. 111-116.

— . *General Explanation of the Tax Reform Act of 1986 (H.R. 3838, 99th Congress; Public Law 99-514).* Washington, DC: U.S. Government Printing Office, May 4, 1987.

INVESTMENT CREDIT FOR REHABILITATION OF STRUCTURES, OTHER THAN HISTORIC STRUCTURES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	([1])	0.1
2009	0.1	([1])	0.1
2010	0.2	([1])	0.2
2011	0.2	0.1	0.3
2012	0.2	0.1	0.3

([1])Less than $50 million.

Authorization

Section 47.

Description

Qualified expenditures made to substantially rehabilitate a nonresidential building receive a 10-percent tax credit. Only expenditures on buildings placed in service before 1936 are eligible. Expenditures made during any 24-month period must exceed the greater of $5,000 or the adjusted basis (cost less depreciation taken) of the building. The basis must be reduced by the full amount of the rehabilitation credit.

For buildings to be eligible, at least 50 percent of the external walls must be retained as external walls, at least 75 percent of the exterior walls must be retained as internal or external walls, and at least 75 percent of the internal structural framework of the building must be retained. The building must not have been moved since 1936.

Impact

This provision encourages business firms to renovate property rather than relocate. The credit reduces the cost of rehabilitation and thereby can turn unprofitable rehabilitation projects into profitable rehabilitation projects, and can make rehabilitation of a building more profitable than new construction.

Rationale

The Revenue Act of 1978 (P.L. 95-600) provided an investment tax credit for rehabilitation expenditures made for nonresidential buildings in use for at least 20 years, in response to concerns over the declining usefulness of older buildings (especially those in older neighborhoods and central cities). The purpose was to promote stability and restore economic vitality to deteriorating areas.

Larger rehabilitation tax credits were enacted in the Economic Recovery Tax Act of 1981(P.L. 97-34); the purpose was to counteract any tendency to encourage firms to relocate and build new plants in response to significantly shortened recovery periods. Concerns were expressed that investment in new structures in new locations does not promote economic recovery if it displaces older structures, and that relocation can cause hardship to workers and their families.

The credit was retained in the Tax Reform Act of 1986 (P.L. 99-514), because investors were viewed as failing to consider social and aesthetic values of restoring older structures. The credit amount was reduced, because the rate would have been too high when compared with the new lower tax rates, also changed by the 1986 act.

Temporary expansion of the tax credit amount was enacted with the Gulf Opportunity Zone Act (GO Zone; P.L. 109-135). The expansion, which became effective for expenditures made after August 28, 2005 and before January 1, 2009, applies to qualified structures located in specific areas of the Gulf Region that were adversely affected by hurricanes in the fall of 2005. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the provision through December 31, 2009.

Assessment

The main criticism of the tax credit is that it allocates investments to restoring older buildings that would not otherwise be profitable, causing economic inefficiency. This allocation may be desirable if there are external benefits to society (*e.g.*, aesthetic benefits or the promotion of using the existing building stock rather than the promotion of destruction and

rebuilding at a greater cost) that the firm would not take into account. Proponents of the credit note that if buildings at least 40 years old are worth saving, then a rolling qualification period should be provided rather than the fixed 1936 date, which was set in 1976 for buildings of that age. More recently, the Joint Committee on Taxation recommended the elimination of the 10 percent credit based on simplification arguments.

Selected Bibliography

Everett, John O. "Rehabilitation Tax Credit Not Always Advantageous," *Journal of Taxation*. August 1989, pp. 96-102.

Kamerick, Megan. "Framers get a History Lesson: Historic Tax Credits Can Help Framers Secure the Shops of Their Dreams," *Art Business News*, v. 31, April 2003, p. S1.

Mann, Roberta F. "Tax Incentives for Historic Preservation: An Antidote for Sprawl?" Widener Law Symposium Journal, v. 8, 2002, pp. 207-236.

National Park Service. Federal Historic Preservation Tax Incentives. [http://www2.cr.nps.gov/history/hps/tps/tax/brochure1.htm] visited Oct. 29, 2008.

Oliver-Remshefski, Rebecca N. "Washington Slept Here: Protection and Preservation of Our Architectural Heritage," *Rutgers Law Review*, v. 55, Winter 2003, pp. 611-640.

Taylor, Jack. *Income Tax Treatment of Rental Housing and Real Estate Investment After the Tax Reform Act of 1986*, Library of Congress, Congressional Research Service Report 87-603 E. Washington, DC: July 2, 1987.

U.S. Congress, Congressional Budget Office. *Budget Options.* "Reduce Tax Credits for Rehabilitating Buildings and Repeal the Credit for Nonhistoric Structures." Washington, DC: February 2001, p. 427.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Act of 1978, H.R. 13511, 95th Congress, Public Law 95-600*. Washington, DC: U.S. Government Printing Office, March 12, 1979, pp. 155-158.

— . *General Explanation of the Economic Recovery Tax Act of 1981, H.R. 4242, 97th Congress, Public Law 97-34*. Washington, DC: U.S. Government Printing Office, December 31, 1981, pp. 111-116.

— . *General Explanation of the Tax Reform Act of 1986, H.R. 3838, 99th Congress, Public Law 99-514*. Washington, DC: U.S. Government Printing Office, May 4, 1987, pp. 148-152.

U.S. General Accounting Office. *Historic Preservation Tax Incentives*. Washington, DC: August 1, 1986.

EXCLUSION OF INCOME ATTRIBUTABLE TO THE DISCHARGE OF PRINCIPAL RESIDENCE ACQUISITION INDEBTEDNESS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	-	0.2
2009	0.3	-	0.3
2010	0.2	-	0.2
2011	0.2	-	0.2
2012	0.1	-	0.1

Authorization

Section 108.

Description

Mortgage debt cancellation can occur when lenders either (1) restructure loans, reducing principal balances or (2) sell properties, either in advance, or as a result, of foreclosure proceedings. Historically, if a lender forgives or cancels such debt, tax law has treated it as cancellation of debt (COD) income subject to tax. Exceptions, however, have been available for certain taxpayers who are insolvent or in bankruptcy — these taxpayers may exclude canceled mortgage debt income under existing law.

An additional exception allows for the exclusion of discharged qualified residential debt from gross income. Qualified indebtedness is defined as debt, limited to $2 million ($1 million if married filing separately), incurred in acquiring, constructing, or substantially improving the taxpayer's

principal residence that is secured by such residence. It also includes refinancing of this debt, to the extent that the refinancing does not exceed the amount of refinanced indebtedness. The taxpayer is required to reduce the basis in the principal residence by the amount of the excluded income.

The provision does not apply if the discharge was on account of services performed for the lender or any other factor not directly related to a decline in the residence's value or to the taxpayer's financial condition. The additional exclusion of discharged qualified residential debt applies to discharges that are made on or after January 1, 2007, and before January 1, 2013.

Impact

The benefits stemming from the exclusion of discharged qualified residential debt from gross income will be concentrated among middle- and higher- income taxpayers, as these households have likely incurred the largest residential debt and are subject to higher marginal tax rates. To a lesser extent, the benefits also extend to lower-income new homeowners who are in distress as a result of interest rate resets and the slowdown in general economic activity. The residential debt of lower-income households, however, is relatively small, thus limiting the overall benefit accruing to these taxpayers.

According to economic theory, discharged debt qualifies as income. As a result, the impact of the exclusion differs across taxpayers with identical income. Specifically, a household who has no forgiven debt can be expected to pay more taxes, all else equal, than a household who has the same amount of income, a part of which constitutes canceled debt.

Rationale

A rationale for excluding canceled mortgage debt income has focused on minimizing hardship for households in distress. Policymakers have expressed concern that households experiencing hardship and in danger of losing their home, presumably as a result of financial distress, should not incur an additional hardship by being taxed on canceled debt income. Some analysts have also drawn a connection between minimizing hardship for individuals and consumer spending; reductions in consumer spending, if significant, can lead to recession.

This provision, as originally included in the Mortgage Forgiveness Debt Relief Act of 2007, P.L. 110-142, was set to expire on January 1st, 2011. The Emergency Economic Stabilization Act of 2008, P.L. 110-343, extended the exclusion through December 31st, 2012.

Assessment

By reducing the amount of taxes a homeowner would otherwise be required to pay, this provision provides relief to those who have qualified residential debt canceled by their lender. The exclusion also likely helps to support consumer spending among distressed borrowers by providing them with an income tax cut. Allowing canceled debt to be excluded from taxable income, however, does not guarantee that a distressed homeowner will retain their home — such outcome is determined in the loss mitigation process.

Opponents argue that an exclusion for canceled mortgage debt income increases the attractiveness of debt forgiveness for homeowners, and could encourage homeowners to be less responsible about fulfilling debt obligations. Some also question why the exclusion is not permanent. If the objective of the exclusion is to provide relief for distressed borrowers, then allowing the exclusion for all borrowers regardless of the overall default rate would be consistent with this objective.

Selected Bibliography

Internal Revenue Service, "Questions and Answers on Home Foreclosure and Debt Cancellation," press release, February 4, 2008, at [http://www.irs.gov/newsroom/article/0,,id=174034,00.html], visited October 28, 2008.

Keightley, Mark P, and Erika Lunder. *Analysis of the Tax Exclusion for Canceled Mortgage Debt Income.* Library of Congress, Congressional Research Service Report RL34212. October 8, 2008.

U.S. Congress, Joint Committee on Taxation, *Technical Explanation of of Title III (Tax Provisions) of Division A of H.R. 1424, The Emergency Economic Stabilization Act of 2008,* JCX-79-08, Washington, DC, October 1, 2008.

REDUCED RATES OF TAX ON DIVIDENDS AND LONG-TERM CAPITAL GAINS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	150.2	-	150.2
2009	148.1	-	148.1
2010	161.6	-	161.6
2011	107.5	-	107.5
2012	100.6	-	100.6

Authorization

Sections 1(h), 631, 1201-1256.

Description

Dividends on corporate stock and gains on the sale of capital assets held for more than a year are subject to lower tax rates under the individual income tax. Individuals subject to the 10- or 15-percent rate pay a zero-percent rate and individuals in higher rates pay a 15-percent rate. After 2010 the rates will revert to their levels prior to changes in 2003 (see rationale). Gain arising from prior depreciation deductions is taxed at ordinary rates but gain arising from straight line depreciation on real estate is taxed at a maximum rate of 25 percent. Also, gain on the sale of property used in a trade or business is treated as a long-term capital gain if all gains for the year on such property exceed all losses for the year on such property. Qualifying property used in a trade or business generally is depreciable property or real estate that is held more than a year, but not inventory.

The tax expenditure is the difference between taxing gains and dividends at the lower rates and taxing them at the rates that apply to other income.

Capital gains of income from timber and on coal and iron ore royalties are listed separately under Natural Resources. In past tax expenditure compendiums, there was a separate entry on gains on farm property including livestock.

To be eligible for the lower dividend rate, stock must be held for 60 out of 120 days that begin 60 days before the ex-dividend day. Only stock paid by domestic corporations and qualified foreign corporations are eligible. For passthrough entities RICs (regulated investment companies, commonly known as mutual funds) and real estate investment trusts (REITs), payments to shareholders are eligible only to the extent they were qualified dividends to the passthrough entities.

Impact

Since higher-income individuals receive most capital gains, benefits accrue to high-income taxpayers. Dividends are also concentrated among higher income individuals, although not to as great a degree as capital gains. Estimates of the benefit in the table below are based on data provided by the Joint Committee on Taxation.[17]

Estimated Distribution of Tax Expenditure, 2005

[In billions of dollars]

Income Class	Capital Gains	Dividends
Less than $50,000	1.5	5.8
$50,000-$100,000	3.9	13.6
$100,000-$200,000	7.1	17.5
$200,000-$1,000,000	21.9	31.1
Over $1,000,000	65.6	32.0

The primary assets that typically yield capital gains are corporate stock, and business and rental real estate. Corporate stock accounts for 20 percent to 50 percent of total realized gains, depending on the state of the economy

[17] These data were released by the Democratic staff of the Ways and Means Committee, June 7, 2006.

and the stock market. There are also gains from assets such as bonds, partnership interests, owner-occupied housing, timber, and collectibles, but all of these are relatively small as a share of total capital gains.

Rationale

Although the original 1913 Act taxed capital gains at ordinary rates, the 1921 law provided for an alternative flat-rate tax for individuals of 12.5 percent for gain on property acquired for profit or investment. This treatment was to minimize the influence of the high progressive rates on market transactions. The Committee Report noted that these gains are earned over a period of years, but are nevertheless taxed as a lump sum.

Over the years, many revisions in this treatment have been made. In 1934, a sliding scale treatment was adopted (where lower rates applied the longer the asset was held). This system was revised in 1938.

In 1942, the sliding scale approach was replaced by a 50-percent exclusion for all but short-term gains (held for less than six months), with an elective alternative tax rate of 25 percent. The alternative tax affected only individuals in tax brackets above 50 percent. The 1942 act also extended special capital gains treatment to property used in the trade or business, and introduced the alternative tax for corporations at a 25-percent rate, the alternative tax rate then in effect for individuals. This tax relief was premised on the belief that many wartime sales were involuntary conversions which could not be replaced during wartime, and that resulting gains should not be taxed at the greatly escalated wartime rates.

Treatment of gain from cutting timber was adopted in 1943, in part to equalize the treatment of those who sold timber as a stand (where income would automatically be considered a capital gain) and those who cut timber. Capital gains treatment for coal royalties was added in 1951 to make the treatment of coal lessors the same as that of timber lessors and to encourage coal production. Similar treatment of iron ore was enacted in 1964 to make the treatment consistent with coal and to encourage production. The 1951 act also specified that livestock was eligible for capital gains, an issue that had been in dispute since 1942.

The alternative tax for individuals was repealed in 1969, and the alternative rate for corporations was reduced to 30 percent. The minimum tax on preference income and the maximum tax offset, enacted in 1969, raised the capital gains rate for some taxpayers.

In 1976 the minimum tax was strengthened, and the holding period lengthened to one year. The effect of these provisions was largely eliminated in 1978, which also saw the introduction of a 60-percent exclusion for individuals and a lowering of the alternative rate for

corporations to 28 percent. The alternative corporate tax rate was chosen to apply the same maximum marginal rate to capital gains of corporations as applied to individuals (since the top rate was 70 percent, and the capital gains tax was 40 percent of that rate due to the exclusion).

The Tax Reform Act of 1986, which lowered overall tax rates and provided for only two rate brackets (15 percent and 28 percent), provided that capital gains would be taxed at the same rates as ordinary income. This rate structure included a "bubble" due to phase-out provisions that caused effective marginal tax rates to go from 28 percent to 33 percent and back to 28 percent.

In 1990, this bubble was eliminated, and a 31-percent rate was added to the rate structure. There had, however, been considerable debate over proposals to reduce capital gains taxes. Since the new rate structure would have increased capital gains tax rates for many taxpayers from 28 percent to 31 percent, the separate capital gains rate cap was introduced. The 28-percent rate cap was retained when the 1993 Omnibus Budget Reconciliation Act added a top rate of 36 percent and a 10-percent surcharge on very high incomes, producing a maximum rate of 39.6 percent.

The Taxpayer Relief Act of 1997 provided the lower rates; its objective was to increase saving and risk-taking, and to reduce lock-in. Individuals subject to the 15-percent rate paid a 10-percent rate and individuals in the 28-, 31-, 36-, and 39.6-percent rate brackets paid a 20-percent rate. Gain arising from prior depreciation deductions was taxed at ordinary rates but with a maximum of 28 percent. Eventually, property held for five years or more would be taxed at 8 percent and 18 percent, rather than 10 percent and 20 percent. The 8-percent rate applied to sales after 2000; the 18-percent rate applied to property *acquired* after 2000 (and, thus, to such property sold after 2005). The holding period was increased to 18 months, but cut back to one year in 1998.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 provided for the current lower rates, with a sunset after 2008 (extended to 2010 by the Tax Increase Prevention and Reconciliation Act of 2006). The stated rationale was to encourage investment and growth, and to reduce the distortions due to higher taxes on dividends, which also encouraged use of debt finance and retention of earnings.

Assessment

The original rationale for allowing a capital gains exclusion or alternative tax benefit — the problem of bunching of income under a progressive tax — is relatively unimportant under the current flatter rate structure.

A primary rationale for reducing the tax on capital gains is to mitigate the lock-in effect. Since the tax is paid only on a realization basis, an individual is discouraged from selling an asset. This effect causes individuals to hold a less desirable mix of assets, causing an efficiency loss. This loss could be quite large relative to revenue raised if the realizations response is large.

Some have argued, based on certain statistical studies, that the lock-in effect is, in fact, so large that a tax cut could actually raise revenue. Others have argued that the historical record and other statistical studies do not support this view and that capital gains tax cuts will cause considerable revenue loss. This debate about the realizations response has been a highly controversial issue, although the weight of the evidence suggests that capital gains tax cuts lead to revenue losses.

Although there are efficiency gains from reducing lock-in, capital gains taxes can also affect efficiency through other means, primarily through the reallocation of resources between types of investments. Lower capital gains taxes may disproportionately benefit real estate investments, and may cause corporations to retain more earnings than would otherwise be the case, causing efficiency losses. At the same time lower capital gains taxes reduce the distortion that favors corporate debt over equity, which produces an efficiency gain.

Another argument in favor of capital gains relief is that much of gain realized is due to inflation. On the other hand, capital gains benefit from deferral of tax in general, and this deferral can become an exclusion if gains are held until death. Moreover, many other types of capital income (*e.g.*, interest income) are not corrected for inflation.

The particular form of this capital gains tax relief also results in more of a concentration towards higher-income individuals than would be the case with an overall exclusion.

The extension of lower rates to dividends in 2003 significantly reduced the pre-existing incentives to corporations to retain earnings and finance with debt, and reduced the distortion that favors corporate over non-corporate investment. It is not at all clear, however, that the lower tax rates will induce increased saving, another stated objective of the 2003 dividend relief, if the tax cuts are financed with deficits.

Selected Bibliography

Amromin, Gene, Paul Harrison, Nellie Liang, and Steven Sharpe, *How Did the 2003 Dividend Tax Cut Affect Stock Prices and Corporate Payout Policy*? Board of Governors of the Federal Reserve System, Finance and Economic Discussion Series 2005-57, 2005.

Amromin, Gene, Paul Harrison, and Steven Sharpe, *How Did the 2003 Dividend Tax Cut Affect Stock Prices*? Board of Governors of the Federal Reserve System, Finance and Economic Discussion Series 2005-61, 2005.

Auerbach, Alan J. "Capital Gains Taxation and Tax Reform," *National Tax Journal*, v. 42. September 1989, pp. 391-401.

Auerbach, Alan J. and Jonathan Siegel. "Capital Gains Realizations of the Rich and Sophisticated," *American Economic Review, papers and proceedings*, v. 84, May 2000, pp. 276-282.

Auerbach, Alan J., Leonard E. Burman, and Jonathan Siegel. "Capital Gains Taxation and Tax Avoidance," in *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, ed. Joel B. Slemrod. New York: Russell Sage, 2000.

Auten, Gerald. "Capital Gains Taxation," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Auten, Gerald E., Leonard E. Burman, and William C. Randolph. "Estimation and Interpretation of Capital Gains Realization Behavior: Evidence from Panel Data," *National Tax Journal*, v. 42. September 1989, pp. 353-374.

Auten, Gerald E., and Joseph J. Cordes. "Cutting Capital Gains Taxes," *Journal of Economic Perspectives*, v. 5. Winter 1991, pp. 181-192.

Bailey, Martin J. "Capital Gains and Income Taxation," *Taxation of Income From Capital*, ed. Arnold C. Harberger. Washington, DC: The Brookings Institution, 1969, pp. 11-49.

Blouin, Jennifer L. ; Raedy, Jana Smith ; Shackelford, Douglas A. "Did Dividends Increase Immediately After the 2003 Reduction in Tax Rates?" NBER Working Paper 10301, Cambridge, MA: National Bureau of Economic Research, February, 2004.

Bogart, W.T. and W.M. Gentry. "Capital Gains Taxes and Realizations: Evidence from Interstate Comparisons," *Review of Economics and Statistics*, v. 71, May 1995, pp. 267-282.

Burman, Leonard E. *The Labyrinth of Capital Gains Tax Policy*. Washington, DC: The Brookings Institution, 1999.

— . "Why Capital Gains Tax Cuts (Probably) Don't Pay for Themselves," *Tax Notes*. April 2, 1990, pp. 109-110.

— , and Peter D. Ricoy. "Capital Gains and the People Who Realize Them," *National Tax Journal*, v. 50, September 1997, pp.427-451.

— , and William C. Randolph. "Measuring Permanent Responses to Capital Gains Tax Changes In Panel Data," *American Economic Review*, v. 84, September, 1994.

— . "Theoretical Determinants of Aggregate Capital Gains Realizations." Manuscript, 1992.

— , Kimberly Clark and John O'Hare. "Tax Reform and Realization of Capital Gains in 1986," *National Tax Journal*, v. 41, March 1994, pp. 63-87.

Carroll, Robert; Hassett, Kevin A.; Mackie, James B., III. "The Effect of Dividend Tax Relief on Investment Incentives," *National Tax Journal,* v. 56, September 2003, pp. 629-651.

Cook. Eric W., and John F. O'Hare, "Capital Gains Redux: Why Holding Periods Matter," *National Tax Journal*, v. 45. March 1992, pp. 53-76.

Chetty, Raj and Emmanuel Saez, "Dividend Taxes and Corporate Behavior: Evidence from the 2003 Dividend Tax Cut," *Quarterly Journal of Economics*, v. 120, August 2005, pp. 791-833..

Dai, Zhonglan, Edward Maydew, Douglas A. Shackelford, and Harold H. Zhang. "Capital Gains Taxes and Asset Prices: Capitalization or Lock-in?" *Journal of Finance*, v. 63, no. 2, April 2008, pp. 709-742.

David, Martin. *Alternative Approaches to Capital Gains Taxation*. Washington DC: The Brookings Institution, 1968.

Davis, Albert J., "Measuring the Distributional Effects of Tax Changes for the Congress," *National Tax Journal*, v. 44. September, 1991, pp. 257-268.

Desai, Mihir, "Taxing Corporation Capital Gains," *Tax Notes*, March 6, 2006, pp. 1079-1092.

Esenwein, Gregg, and Jane G. Gravelle, *The Taxation of Dividend Income: An Overview and Economic Analysis of the Issues*, Library of Congress, Congressional Research Service, Report RL31597, Washington, DC: June 2, 2006.

Fox, John O., "The Great Capital Gains Debate," Chapter 12, *If Americans Really Understood the Income Tax*, Boulder, Colorado: Westview Press, 2001.

Gillingham, Robert, and John S. Greenlees, "The Effect of Marginal Tax Rates on Capital Gains Revenue: Another Look at the Evidence," *National Tax Journal*, v. 45. June 1992, pp. 167-178.

Gordon, Roger, and Martin Dietz, *Dividends and Taxes*, National Bureau of Economic Research Working Paper 12292, Cambridge, MA, 2005.

Gravelle, Jane G. *Can a Capital Gains Tax Cut Pay for Itself*? Library of Congress, Congressional Research Service Report 90-161 RCO. Washington, DC: March 23, 1990.

— . *Capital Gains Taxes: An Overview*. Library of Congress, Congressional Research Service Report 96-769 E. Washington, DC: Updated July 15, 2003.

— . *Capital Gains Taxes, Innovation and Growth*. Library of Congress, Congressional Research Service Report RL30040, July 14, 1999.

— . *Economic Effects of Taxing Capital Income*, Chapters 4 and 6. Cambridge, MA: MIT Press, 1994.

— . "Effects of Dividend Relief on Economic Growth, The Stock Market, and Corporate Tax Preferences," *National Tax Journal*, v. 56, September 2003, 653-668.

— . *Limits to Capital Gains Feedback Effects*. Library of Congress, Congressional Research Service Report 91-250. Washington, DC: March 15, 1991.

Hoerner, J. Andrew, ed. *The Capital Gains Controversy: A Tax Analyst's Reader*. Arlington, VA: Tax Analysts, 1992.

Holt, Charles C., and John P. Shelton, "The Lock-In Effect of the Capital Gains Tax," *National Tax Journal*, v. 15. December 1962, pp. 357-352.

Hungerford, Thomas L. and Jane G. Gravelle. *An Analysis of the Tax Treatment of Capital Losses*, Library of Congress, Congressional Research Service Report RL31562, Washington, DC: October 20, 2008.

Kiefer, Donald W. "Lock-In Effect Within a Simple Model of Corporate Stock Trading," *National Tax Journal*, v. 43. March 1990, pp. 75-95.

Lang, Mark H. and Douglas A. Shackleford. "Capitalization of Capital Gains Taxes: Evidence from Stock Price Reactions to the 1997 Rate Reduction." *Journal of Public Economics*, v. 76 (April 2000), pp. 69-85.

Minarik, Joseph. "Capital Gains," *How Taxes Affect Economic Behavior*, eds. Henry J. Aaron and Joseph A. Pechman. Washington, DC: The Brookings Institution, 1983, pp. 241-277.

Plancich, Stephanie. "Mutual Fund Capital Gain Distributions and the Tax Reform Act of 1997," *National Tax Journal* v.56,March 2003 (Part 2), pp. 271-96.

Poterba, James, "Venture Capital and Capital Gains Taxation," *Tax Policy and the Economy*, v. 3, ed. Lawrence H. Summers, National Bureau of Economic Research. Cambridge, Mass.: MIT Press, 1989, pp. 47-67.

Slemrod, Joel, and William Shobe. "The Tax Elasticity of Capital Gains Realizations: Evidence from a Panel of Taxpayers," National Bureau of Economic Research Working Paper 3737. January 1990.

U.S. Congress, Congressional Budget Office. *How Capital Gains Tax Rates Affect Revenues: The Historical Evidence*. Washington, DC: U.S. Government Printing Office, March 1988.

— . *An Analysis of the Potential Macroeconomic Effects of the Economic Growth Act of 1998.* Prepared by John Sturrock. Washington, DC: August 1, 1998.

— . *Indexing Capital Gains*, prepared by Leonard Burman and Larry Ozanne. Washington, DC: U.S. Government Printing Office, August 1990.

— . *Perspectives on the Ownership of Capital Assets and the Realization of Gains*. Prepared by Leonard Burman and Peter Ricoy. Washington, DC: May 1997.

U.S. Congress, Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in 1997*. 105th Congress, 1st Session. Washington, DC: U.S. Government Printing Office, December 17,1997, pp. 48-56.

U.S. Department of the Treasury, Office of Tax Analysis. *Report to the Congress on the Capital Gains Tax Reductions of 1978*. Washington, DC: U.S. Government Printing Office, September 1985.

Wetzler, James W. "Capital Gains and Losses," *Comprehensive Income Taxation*, ed. Joseph Pechman. Washington, DC: The Brookings Institution, 1977, pp. 115-162.

Zhang, Yi, Kathleen A. Farrell, and Todd A. Brown. "Ex-dividend Day Price and Volume: The Case of 2003 Dividend Tax Cut," *National Tax Journal*, v. 61, no. 1, March 2008, pp. 105-127.

Zodrow, George R. "Economic Analysis of Capital Gains Taxation: Realizations, Revenues, Efficiency and Equity," *Tax Law Review*, v. 48, no. 3, pp. 419-527.

EXCLUSION OF CAPITAL GAINS AT DEATH
CARRYOVER BASIS OF CAPITAL GAINS ON GIFTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	29.0	-	29.0
2009	30.1	-	30.1
2010	44.7	-	44.7
2011	52.2	-	52.2
2012	48.7	-	48.7

Authorization

Sections 1001, 1002, 1014, 1015, 1023, 1040, 1221, and 1222.

Description

A capital gains tax generally is imposed on the increased value of a capital asset (the difference between sales price and original cost of the asset) when the asset is sold or exchanged. This tax is not, however, imposed on the appreciation in value when ownership of the property is transferred as a result of the death of the owner or as a gift during the lifetime of the owner.

In the case of assets transferred at death, the heir's cost basis in the asset (the amount that he subtracts from sales price to determine gain if the asset is sold in the future) generally is the fair market value as of the date of decedent's death. Thus no income tax is imposed on appreciation occurring before the decedent's death, since the cost basis is increased by the amount of appreciation that has already occurred. In the case of gift transfers, the donee's basis in the property is the same as the donor's (usually the original cost of the asset). Thus, if the donee disposes of the property in a sale or exchange, the capital gains tax will apply to the pre-transfer appreciation.

Tax on the gain is deferred, however, and may be forgiven entirely if the donee in turn passes on the property at death.

Assets transferred at death or by *inter vivos* gifts (gifts between living persons) may be subject to the Federal estate and gift taxes, respectively, based upon their value at the time of transfer. In 2010, when the estate tax is scheduled to expire, some gain will be taxed at death, but this provision will sunset after 2010.

Impact

The exclusion of capital gains at death is most advantageous to individuals who need not dispose of their assets to achieve financial liquidity. Generally speaking, these individuals tend to be wealthier. The deferral of tax on the appreciation involved combined with the exemption for the appreciation before death is a significant benefit for these investors and their heirs.

Failure to tax capital gains at death encourages lock-in of assets, which in turn means less current turnover of funds available for investment. In deciding whether to change his portfolio, an investor, in theory, takes into account the higher pre-tax rate of return he might obtain from the new investment, the capital gains tax he might have to pay if he changes his portfolio, and the capital gains tax his heirs might have to pay if he decides not to change his portfolio.

Often an investor in this position decides that, since his heirs will incur no capital gains tax on appreciation prior to the investor's death, he should transfer his portfolio unchanged to the next generation. The failure to tax capital gains at death and the deferral of tax tend to benefit high-income individuals (and their heirs) who have assets that yield capital gains.

Some insight into the distributional effects of this tax expenditure may be found by considering the distribution of current payments of capital gains tax, based on data provided by the Joint Committee on Taxation.[18] These taxes are heavily concentrated among high-income individuals. Of course, the distribution of capital gains taxes could be different from the distribution of taxes not paid because they are passed on at death, but the provision would always accrue largely to higher-income individuals who tend to hold most of the wealth in the country.

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[18] Released by the Democratic staff of the Ways and Means Committee, June 7, 2006.

Estimated Distribution of Capital Gains Taxes, 2005

Income Class	Percentage
Less than $50,000	1.2
$50,000-$100,000	3.7
$100,000-$1,000,000	30.7
Over $1,000,000	64.4

The primary assets that typically yield capital gains are corporate stock, real estate, and owner-occupied housing.

Rationale

The original rationale for nonrecognition of capital gains on *inter vivos* gifts or transfers at death is not indicated in the legislative history of any of the several interrelated applicable provisions. However, one current justification given for the treatment is that death and *inter vivos* gifts are considered as inappropriate events to result in the recognition of income.

The Tax Reform Act of 1976 provided that the heir's basis in property transferred at death would be determined by reference to the decedent's basis. This carryover basis provision was not permitted to take effect and was repealed in 1980. The primary stated rationale for repeal was the concern that carryover basis created substantial administrative burdens for estates, heirs, and the Treasury Department.

Assessment

Failure to tax gains transferred at death is probably a primary cause of lock-in and its attendant efficiency costs; indeed, without the possibility of passing on gains at death without taxation, the lock-in effect would be greatly reduced.

The lower capital gains taxes that occur because of failure to tax capital gains at death can also affect efficiency through other means, primarily through the reallocation of resources between types of investments. Lower capital gains taxes may disproportionally benefit real estate investments and may cause corporations to retain more earnings than would otherwise be the case, causing efficiency losses. At the same time, lower capital gains taxes reduce the distortion that favors corporate debt over equity, which produces an efficiency gain.

There are several problems with taxing capital gains at death. There are administrative problems, particularly for assets held for a very long time when heirs do not know the basis. In addition, taxation of capital gains at death would cause liquidity problems for some taxpayers, such as owners of small farms and businesses. Therefore most proposals for taxing capital gains at death would combine substantial averaging provisions, deferred tax payment schedules, and a substantial deductible floor in determining the amount of gain to be taxed.

Selected Bibliography

Auerbach, Alan J. "Capital Gains Taxation and Tax Reform," *National Tax Journal*, v. 42. September, 1989, pp. 391-401.

Auerbach, Alan J., Leonard E. Burman, and Jonathan Siegel. "Capital Gains Taxation and Tax Avoidance," in *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, ed. Joel B. Slemrod. New York: Russell Sage, 2000.

Auten, Gerald. "Capital Gains Taxation," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Bailey, Martin J. "Capital Gains and Income Taxation," *Taxation of Income From Capital*, ed. Arnold C. Harberger. Washington, DC: The Brookings Institution, 1969, pp. 11-49.

Bogart, W.T. and W.M. Gentry. "Capital Gains Taxes and Realizations: Evidence from Interstate Comparisons," *Review of Economics and Statistics*, v. 71, May 1995, pp. 267-282.

Burman, Leonard E. *The Labyrinth of Capital Gains Tax Policy*. Washington, DC: The Brookings Institution, 1999.

Burman, Leonard E., and Peter D. Ricoy. "Capital Gains and the People Who Realize Them," *National Tax Journal*, v. 50, September 1997, pp.427-451.

Burman, Leonard E., and William C. Randolph. "Measuring Permanent Responses to Capital Gains Tax Changes In Panel Data," *American Economic Review*, v. 84, September, 1994.

—. "Theoretical Determinants of Aggregate Capital Gains Realizations," Manuscript, 1992.

David, Martin. *Alternative Approaches to Capital Gains Taxation*. Washington, DC: The Brookings Institution, 1968.

Fox, John O., "The Great Capital Gains Debate," Chapter 12, *If Americans Really Understood the Income Tax*, Boulder, Colorado: Westview Press, 2001.

Gravelle, Jane G. *Can a Capital Gains Tax Cut Pay for Itself*? Library of Congress, Congressional Research Service Report 90-161 RCO, March 23, 1990.

—. *Capital Gains Tax Issues and Proposals: An Overview*. Library of Congress, Congressional Research Service Report 96-769 E. Washington, DC: Updated August 30, 1999.

— . *Capital Gains Taxes, Innovation and Growth*. Library of Congress, Congressional Research Service Report RL30040, July 14, 1999.

— . *Economic Effects of Taxing Capital Income*, Chapter 6. Cambridge, MA: MIT Press, 1994.

— . *Limits to Capital Gains Feedback Effects*. Library of Congress, Congressional Research Service Report 91-250, March 15, 1991.

Hoerner, J. Andrew, ed. *The Capital Gains Controversy: A Tax Analyst's Reader*. Arlington, VA: Tax Analysts, 1992.

Holt, Charles C., and John P. Shelton. "The Lock-In Effect of the Capital Gains Tax," *National Tax Journal*, v. 15. December 1962, pp. 357-352.

Kiefer, Donald W. "Lock-In Effect Within a Simple Model of Corporate Stock Trading," *National Tax Journal*, v. 43. March, 1990, pp. 75-95.

Minarik, Joseph. "Capital Gains." *How Taxes Affect Economic Behavior*, eds. Henry J. Aaron and Joseph A. Pechman. Washington, DC: The Brookings Institution, 1983, pp. 241-277.

Surrey, Stanley S., *et al*., eds. "Taxing Capital Gains at the Time of a Transfer at Death or by Gift," *Federal Tax Reform for 1976*. Washington, DC: Fund for Public Policy Research, 1976, pp. 107-114.

U.S. Congress, Congressional Budget Office. *Perspectives on the Ownership of Capital Assets and the Realization of Gains*. Prepared by Leonard Burman and Peter Ricoy. Washington, DC: May 1997.

— . *An Analysis of the Potential Macroeconomic Effects of the Economic Growth Act of 1998.* Prepared by John Sturrock. Washington, DC: August 1, 1998.

U.S. Congress, Senate Committee on Finance hearing. *Estate and Gift Taxes: Problems Arising from the Tax Reform Act of 1976*. 95th Congress, 1st session, July 25, 1977.

U.S. Department of the Treasury, Office of Tax Analysis. *Report to the Congress on the Capital Gains Tax Reductions of 1978*. Washington, DC: U.S. Government Printing Office, September, 1985.

Wagner, Richard E. *Inheritance and the State.* Washington, DC: American Enterprise Institute for Public Policy Research, 1977.

Wetzler, James W. "Capital Gains and Losses," *Comprehensive Income Taxation*, ed. Joseph Pechman. Washington, DC: The Brookings Institution, 1977, pp. 115-162.

Zodrow, George R. "Economic Analysis of Capital Gains Taxation: Realizations, Revenues, Efficiency and Equity," *Tax Law Review*, v. 48, no. 3, pp. 419-527.

DEFERRAL OF GAIN ON NON-DEALER INSTALLMENT SALES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.5	1.1	1.6
2009	0.5	1.2	1.7
2010	0.6	1.3	1.9
2011	0.7	1.4	2.1
2012	0.7	1.5	2.2

Authorization

Sections 453 and 453A(b).

Description

An installment sale is a sale of property in which at least one payment will be received in a tax year later than the year in which the sale took place. Some taxpayers are allowed to report some sales of this kind for tax purposes under a special method of accounting, called the installment method, in which the gross profit from the sale is prorated over the years during which the payments are received.

This conveys a tax advantage compared to being taxed in full in the year of the sale, because the taxes that are deferred to future years have a time value (the amount of interest they could earn).

Use of the installment method was once widespread, but it has been severely curtailed in recent years. Under current law, it can be used only by persons who do not regularly deal in the property being sold (except for the sellers of farm property, timeshares, and residential building lots who may

use the installment method but must pay interest on the deferred taxes). In 2004, a provision of the American Jobs Creation Act denied the installment sale treatment to readily tradeable debt.

For sales by non-dealers, interest must be paid to the government on the deferred taxes attributable to the portion of the installment sales that arise during and remain outstanding at the end of the tax year of more than $5,000,000. Transactions where the sales price is less than $150,000 do not count towards the $5,000,000 limit. Interest payments offset the value of tax deferral, so this tax expenditure represents only the revenue loss from those transactions that give rise to interest-free deferrals.

Impact

Installment sale treatment constitutes a departure from the normal rule that gain is recognized when the sale of property occurs. The deferral of taxation permitted under the installment sale rules essentially furnishes the taxpayer an interest-free loan equal to the amount of tax on the gain that is deferred.

The benefits of deferral are currently restricted to those transactions by non-dealers in which the sales price is no more than $150,000 and to the first $5,000,000 of installment sales arising during the year, to sales of personal-use property by individuals, and to sales of farm property. (There are other restrictions on many types of transactions, such as in corporate reorganizations and sales of depreciable assets.)

Thus the primary benefit probably flows to sellers of farms, small businesses, and small real estate investments.

Rationale

The rationale for permitting installment sale treatment of income from disposition of property is to match the time of payment of tax liability with the cash flow generated by the disposition. It has usually been considered unfair, or at least impractical, to attempt to collect the tax when the cash flow is not available, and some form of installment sale reporting has been permitted since at least the Revenue Act of 1921. It has frequently been a source of complexity and controversy, however, and has sometimes been used in tax shelter and tax avoidance schemes.

Installment sale accounting was greatly liberalized and simplified in the Installment Sales Revision Act of 1980 (P.L. 96-471). It was significantly restricted by a complex method of removing some of its tax advantages in the Tax Reform Act of 1986, and it was repealed except for the limited uses in the Omnibus Budget Reconciliation Act of 1987. Further restrictions applicable to accrual method taxpayers were enacted in the Work Incentives

Improvement Act of 1999 (P.L. 106-170). The 1999 Act prohibited most accrual basis taxpayers from using the installment method of accounting. Concern, however, in the small business community over these changes led to the passage, in December 2000, of the Installment Tax Correction Act of 2000 (P.L. 106-573). The 2000 Act repealed the restrictions on the installment method of accounting imposed by the 1999 Act. The repeal was made retroactive to the date of enactment of the 1999 change.

Assessment

The installment sales rules have always been pulled between two opposing goals: taxes should not be avoidable by the way a deal is structured, but they should not be imposed when the money to pay them is not available. Allowing people to postpone taxes simply by taking a note instead of cash in a sale leaves obvious room for tax avoidance.

Trying to collect taxes from taxpayers who do not have the cash to pay is administratively difficult and strikes many as unfair. After having tried many different ways of balancing these goals, lawmakers have settled on a compromise that denies the advantage of the method to taxpayers who would seldom have trouble raising the cash to pay their taxes (retailers, dealers in property, investors with large amounts of sales) and permits its use to small, non-dealer transactions (with "small" rather generously defined).

Present law results in modest revenue losses and probably has little effect on economic incentives.

Selected Bibliography

Esenwein, Gregg. *Recent Tax Changes Affecting Installment Sales*. Library of Congress, Congressional Research Service Report RS20432. Washington, DC: January 2002.

U.S. Congress, Joint Committee on Taxation. *Overview of the Issues Relating to the Modification of the Installment Sales Rules by the Ticket to Work Incentives Improvement Act of 1999*, Report JCX-15-00, February 2000.

— . *General Explanation of Tax Legislation Enacted in the 106th Congress*. JCS-2-01. April 2001. p. 176.

U.S. Congress, House. *Omnibus Budget Reconciliation Act of 1987*, Conference Report to Accompany H.R. 3545. 100th Congress, 1st session, Report 100-495, pp. 926-931.

— . Committee on Ways and Means. *Installment Sales Revision Act of 1980*, Report to Accompany H.R. 6883. 98th Congress, 2nd session, Report 96-1042.

Internal Revenue Service. *Installment Sales*. Publication 537, for use in preparing 2005 returns.

U.S. Congress, Joint Committee on Taxation. *Comparison Of Certain Provisions Of H.R. 4520 As Passed By The House Of Representatives And As Amended By The Senate: Revenue Provisions*, Report JCX-64-04, September 2004, p. 57.

DEFERRAL OF GAIN ON LIKE-KIND EXCHANGES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.5	3.0	3.5
2009	1.1	3.0	4.1
2010	1.1	3.1	4.2
2011	1.2	3.2	4.4
2012	1.1	3.3	4.4

Authorization

Section 1031.

Description

When business or investment property is exchanged for property of a "like-kind," no gain or loss is recognized on the exchange and therefore no tax is paid at the time of the exchange on any appreciation. This is in contrast to the general rule that any sale or exchange for money or property is a taxable event.

It is also an exception to the rules allowing tax-free exchanges when the property is "similar or related in service or use," the much stricter standard applied in other areas, such as replacing condemned property (section 1033). The latter is not considered a tax expenditure, but the postponed tax on appreciated property exchanged for "like-kind" property is.

Impact

The like-kind exchange rules have been liberally interpreted by the courts to allow tax-free exchanges of property of the same general type but of very different quality and use. All real estate, in particular, is considered "like-kind," allowing a retiring farmer from the Midwest to swap farm land for a Florida apartment building or a right to pump water tax-free.

The provision is very popular with real estate interests, some of whom specialize in arranging property exchanges. It is useful primarily to persons who wish to alter their real estate holdings without paying tax on their appreciated gain.

Stocks and financial instruments are generally not eligible for this provision, so it is not useful for rearranging financial portfolios. As an exception to this rule, the Food, Conservation, and Energy Act of 2008 (P.L. 110-246) provides that the general exclusion from section 1031 treatment for stocks shall not apply to shares in a qualified mutual ditch, reservoir, or irrigation company.

Rationale

The general rationale for allowing tax-free exchanges is that the investment in the new property is merely a continuation of the investment in the old. A tax-policy rationale for going beyond this, to allowing tax-free adjustments of investment holdings to more advantageous positions, does not seem to have been offered. It may be that this was an accidental outgrowth of the original rule.

A provision allowing tax-free exchanges of like-kind property was included in the first statutory tax rules for capital gains in the Revenue Act of 1921 and has continued in some form until today. Various restrictions over the years took many kinds of property and exchanges out of its scope, but the rules for real estate, in particular, were broadened over the years by court decisions. In moves to reduce some of the more egregious uses of the rules, the Deficit Reduction Act of 1984 set time limits on completing exchanges and the Omnibus Budget Reconciliation Act of 1989 outlawed tax-free exchanges between related parties.

Among more recent legislative changes was a provision of the American Jobs Creation Act of 2004, as amended in Gulf Opportunity Zone Act of 2005, affecting the recognition of a gain on a principal residence acquired in a like-kind exchange. The exclusion for gain on the sale of a principal residence no longer applies if the principal residence was acquired in a like-kind exchange within the past five years. In effect, this requires the taxpayer to hold the exchanged property for a full five years before it would qualify as a principal residence.

Assessment

From an economic perspective, the failure to tax appreciation in property values as it occurs defers tax liability and thus offers a tax benefit. (Likewise, the failure to deduct *declines* in value is a tax penalty.) Continuing the "nonrecognition" of gain, and thus the tax deferral, for a longer period by an exchange of properties adds to the tax benefit.

This treatment does, however, both simplify transactions and make it less costly for businesses and investors to replace property. Taxpayers gain further benefit from the loose definition of "like-kind," because they can also switch their property holdings to types they prefer without tax consequences. This might be justified as reducing the inevitable bias a tax on capital gains causes against selling property, but it is difficult to argue for restricting the relief primarily to those taxpayers engaged in sophisticated real estate transactions.

Selected Bibliography

Carnes, Gregory A., and Ted D. Englebrecht. "Like-kind Exchanges — Recent Developments, Restrictions, and Planning Opportunities," *CPA Journal*. January 1991, pp. 26-33.

Esenwein, Gregg A. *The Sale of a Principal Residence Acquired Through a Like-Kind Exchange*. Library of Congress, Congressional Research Service Report RS22113. Washington DC: 2005.

Internal Revenue Service. *Sales and Other Dispositions of Assets*. Publication 544, for use in preparing 2005 returns.

U.S. Congress, Congressional Budget Office. *Budget Options*. February 2001, p. 423.

U.S. Congress, House Committee on Ways and Means. *Omnibus Budget Reconciliation Act of 1989.* Conference Report to Accompany H.R. 3299, Report 101-386, November 21, 1989, pp. 613-614.

U.S. Congress, Joint Committee on Taxation. *Study of the Overall State of the Federal Tax System and Recommendations for Simplification, Pursuant to Section 8022(3)(B) of the Internal Revenue Code of 1986, Volume II*, JCS-3-01, pp. 300-305, April 2001.

— , *Description of Revenue Provisions to Be Considered in Connection With the Markup of the Miscellaneous Trade and Technical Corrections Act of 1999*, JCS-2-00, p. 494, March 2000.

— , *Description of Possible Options to Increase Revenues Prepared for the Committee On Ways and Means.* JCS-17-87, June 25, 1987, pp. 240-241.

— , *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* JCS-41-84, December 31, 1984, pp. 243-247.

Woodrum, William L., Jr. "Structuring an Exchange of Property to Defer Recognition of Gain," *Taxation for Accountants*. November 1986, pp. 334-339.

U.S. Congress, Joint Committee on Taxation. *Comparison Of Certain Provisions Of H.R. 4520 As Passed By The House Of Representatives And As Amended By The Senate: Revenue Provisions*, Report JCX-64-04, September 2004, p. 25.

DEPRECIATION OF BUILDINGS OTHER THAN RENTAL HOUSING IN EXCESS OF ALTERNATIVE DEPRECIATION SYSTEM

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.4	1.4	2.8
2009	2.9	3.0	5.9
2010	2.9	2.9	5.8
2011	1.9	1.9	3.9
2012	1.9	1.9	3.8

Authorization

Section 167 and 168.

Description

Taxpayers are allowed to deduct the costs of acquiring depreciable assets (assets that wear out or become obsolete over a period of years) as depreciation deductions. The tax code currently allows new buildings other than rental housing to be written off over 39 years, using a "straight line" method where equal amounts are deducted in each period. There is also a prescribed 40 year write-off period for these buildings under the alternative minimum tax (also based on a straight-line method). Improvements required for a new leasehold for a non-residential structure, for certain restaurant improvements and for certain retail improvements made at least three years after original construction may be depreciated over 15 years. This provision applies through 2009. Motorsports complexes (tracks and other land improvements and support facilities) are depreciated over seven

years using a double declining balance method (where a rate twice as large as straight line is applied to the undepreciated balance, with a switch to straightline midway through the period). About half the revenue cost is due to the special provisions, primarily the treatment of leasehold improvements.

The tax expenditure measures the revenue loss from current depreciation deductions in excess of the deductions that would have been allowed under this longer 40-year period. The current revenue effects also reflect different write-off methods and lives prior to the 1993 revisions, which set the 39-year life, since many buildings pre-dating that time are still being depreciated.

Prior to 1981, taxpayers were generally offered the choice of using the straight-line method or accelerated methods of depreciation, such as double-declining balance and sum-of-years digits, in which greater amounts are deducted in the early years. Non-residential buildings were restricted in 1969 to 150-percent declining balance (used buildings were restricted to straight-line). The period of time over which deductions were taken varied with the taxpayer's circumstances.

Beginning in 1981, the tax law prescribed specific write-offs which amounted to accelerated depreciation over periods varying from 15 to 19 years. In 1986, all depreciation on nonresidential buildings was calculated on a straight-line basis over 31.5 years, and that period was increased to 39 years in 1993.

Example: Suppose a building with a basis of $10,000 was subject to depreciation over 39 years. Depreciation allowances would be constant at 1/39 x $10,000 = $257. For a 40-year life the write-off would be $250 per year. The tax expenditure in the first year would be measured as the difference between the tax savings of deducting $250, instead of $257, or $7.

Impact

Because depreciation methods that are faster than straight-line allow for larger deductions in the early years of the asset's life and smaller depreciation deductions in the later years, and because shorter useful lives allow quicker recovery, accelerated depreciation results in a deferral of tax liability.

It is a tax expenditure to the extent it is faster than economic (*i.e.*, actual) depreciation, and evidence indicates that the economic decline rate for non-residential buildings is much slower than that reflected in tax depreciation methods.

The direct benefits of accelerated depreciation accrue to owners of buildings, and particularly to corporations. The benefit is estimated as the tax saving resulting from the depreciation deductions in excess of

straight-line depreciation. Benefits to capital income tend to concentrate in the higher-income classes (see discussion in the Introduction).

Rationale

Prior to 1954, depreciation policy had developed through administrative practices and rulings. The straight-line method was favored by IRS and generally used. Tax lives were recommended for assets through "Bulletin F," but taxpayers were also able to use a facts and circumstances justification.

A ruling issued in 1946 authorized the use of the 150-percent declining balance method. Authorization for it and other accelerated depreciation methods first appeared in legislation in 1954 when the double declining balance and other methods were enacted. The discussion at that time focused primarily on whether the value of machinery and equipment declined faster in their earlier years. However, when the accelerated methods were adopted, real property was included as well.

By the 1960s, most commentators agreed that accelerated depreciation resulted in excessive allowances for buildings. The first restriction on depreciation was to curtail the benefits that arose from combining accelerated depreciation with lower capital gains taxes when the building was sold.

In 1964, 1969, and 1976 various provisions to "recapture" accelerated depreciation as ordinary income in varying amounts when a building was sold were enacted. In 1969, depreciation for nonresidential structures was restricted to 150-percent declining balance methods (straight-line for used buildings).

In the Economic Recovery Tax Act of 1981, buildings were assigned specific write-off periods that were roughly equivalent to 175-percent declining balance methods (200 percent for low-income housing) over a 15-year period under the Accelerated Cost Recovery System (ACRS). These changes were intended as a general stimulus to investment.

Taxpayers could elect to use the straight-line method over 15 years, 35 years, or 45 years. (The Deficit Reduction Act of 1984 increased the 15-year life to 18 years; in 1985, it was increased to 19 years.) The recapture provisions would not apply if straight-line methods were originally chosen. The acceleration of depreciation that results from using the shorter recovery period under ACRS was not subject to recapture as accelerated depreciation.

The current straight-line treatment was adopted as part of the Tax Reform Act of 1986, which lowered tax rates and broadened the base of the income

tax. A 31.5-year life was adopted at that time; it was increased to 39 years by the Omnibus Budget Reconciliation Act of 1993.

In 2002, certain qualified leasehold improvements in non-residential buildings were made eligible for a temporary bonus depreciation (expiring after 2004) allowing 30 percent of the cost to be deducted when incurred. The percentage was increased to 50 percent in 2003. Leasehold improvements were also included in the temporary one year 50% bonus depreciation for 2008, enacted by H.R. 5140, the fiscal stimulus bill passed in February 2008.

The provision allowing a 15-year recovery period for qualified leasehold improvements and restaurant improvements was adopted in 2004 but suspended after 2005. The arguments made for this treatment were that such investments had a shorter useful life than buildings in general. H.R. 6111 (December 2006) extended the provision through 2007 and the Emergency Economic Stabilization Act (P.L.110-343), enacted in October 2008, extended it through 2009. The seven year life for the motorsports complex had been in the regulations for some time, assigning these assets to the category of amusement park assets. When the Treasury reconsidered the appropriateness of this classification, Congress in 2004 made the seven year treatment mandatory through 2007; this provision was also extended through 2009 by H.R. 1424. H.R. 1424 also included retail improvement property in the 15 year life.

Assessment

Evidence suggests that the rate of economic decline of rental structures is much slower than the rates allowed under current law, and this provision causes a lower effective tax rate on such investments than would otherwise be the case. This treatment in turn tends to increase investment in nonresidential structures relative to other assets, although there is considerable debate about how responsive these investments are to tax subsidies.

At the same time, the more rapid depreciation roughly offsets the understatement of depreciation due to the use of historical cost basis depreciation, assuming inflation is at a rate of two percent or so. Moreover, many other assets are eligible for accelerated depreciation as well, and the allocation of capital depends on the relative treatment.

Much of the previous concern about the role of accelerated depreciation in encouraging tax shelters in commercial buildings has faded because the current depreciation provisions are less rapid than those previously in place and because there is a restriction on the deduction of passive losses.

Selected Bibliography

Auerbach, Alan, and Kevin Hassett. "Investment, Tax Policy, and the Tax Reform Act of 1986," *Do Taxes Matter: The Impact of the Tax Reform Act of 1986*, ed. Joel Slemrod. Cambridge, Mass: The MIT Press, 1990, pp. 13-49.

Board of Governors of the Federal Reserve System. *Public Policy and Capital Formation*. April 1981.

Brannon, Gerard M. "The Effects of Tax Incentives for Business Investment: A Survey of the Economic Evidence," U.S. Congress, Joint Economic Committee, *The Economics of Federal Subsidy Programs,* Part 3: "Tax Subsidies." July 15, 1972, pp. 245-268.

Brazell, David W. and James B. Mackie III. "Depreciation Lives and Methods: Current Issues in the U.S. Capital Cost Recovery System," *National Tax Journal*, v. 53 (September 2000), pp. 531-562.

Break, George F. "The Incidence and Economic Effects of Taxation," *The Economics of Public Finance*. Washington, DC: The Brookings Institution, 1974.

Burman, Leonard E., Thomas S. Neubig, and D. Gordon Wilson. "The Use and Abuse of Rental Project Models," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 307-349.

Cummins, Jason G., Kevin Hassett and R. Glenn Hubbard. "Have Tax Reforms Affected Investment?" in James M. Poterba, *Tax Policy and The Economy*, v. 9, Cambridge: MIT Press, 1994.

— . *A Reconsideration of Investment Behavior Using Tax Reforms as Natural Experiments*, Brookings Papers on Economic Activity no. 2, 1994, pp. 1-74.

Deloitte and Touche. *Analysis of the Economic Depreciation of Structure*, Washington, DC: June 2000.

Feldstein, Martin. "Adjusting Depreciation in an Inflationary Economy: Indexing Versus Acceleration," *National Tax Journal*, v. 34. March 1981, pp. 29-43.

Follain, James R., Patric H. Hendershott, and David C. Ling, "Real Estate Markets Since 1980: What Role Have Tax Changes Played?" *National Tax Journal,* vol. 45, September 1992, pp. 253-266.

Fromm, Gary, ed. *Tax Incentives and Capital Spending*. Washington, DC: The Brookings Institution, 1971.

Fullerton, Don, Robert Gillette, and James Mackie, "Investment Incentives Under the Tax Reform Act of 1986," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 131-172.

Fullerton, Don, Yolanda K. Henderson, and James Mackie, "Investment Allocation and Growth Under the Tax Reform Act of 1986," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 173-202.

Gravelle, Jane G. "Differential Taxation of Capital Income: Another Look at the Tax Reform Act of 1986," *National Tax Journal*, v. 63. December 1989, pp. 441-464.

— . *Depreciation and the Tax Treatment of Real Estate*. Library of Congress, Congressional Research Service Report RL30163. Washington, DC: October 25, 2000.

— . *Economic Effects of Taxing Capital Income*, Chapter 6. Cambridge, MA: MIT Press, 1994.

— . "Whither Tax Depreciation?" *National Tax Journal*, vol. 54, September, 2001, pp. 513-526.

Harberger, Arnold. "Tax Neutrality in Investment Incentives," *The Economics of Taxation*, eds. Henry J. Aaron and Michael J. Boskin. Washington, DC: The Brookings Institution, 1980.

Hulten, Charles, ed. *Depreciation, Inflation, and the Taxation of Income From Capital*. Washington, DC: The Urban Institute, 1981.

Hulten, Charles R., and Frank C. Wykoff. "Issues in Depreciation Measurement." *Economic Inquiry*, v. 34, January 1996, pp. 10-23.

Jorgenson, Dale W. "Empirical Studies of Depreciation." *Economic Inquiry*, v. 34, January 1996, pp. 24-42.

Mackie, James. "Capital Cost Recovery," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Nadiri, M. Ishaq, and Ingmar R. Prucha. "Depreciation Rate Estimation of Physical and R&D Capital." *Economic Inquiry*, v. 34, January 1996, pp. 43-56.

Taubman, Paul and Robert Rasche. "Subsidies, Tax Law, and Real Estate Investment," U.S. Congress, Joint Economic Committee, *The Economics of Federal Subsidy Program,"* Part 3: "Tax Subsidies." July 15, 1972, pp. 343-369.

U.S. Congress, Congressional Budget Office. *Real Estate Tax Shelter Subsidies and Direct Subsidy Alternatives*. May 1977.

— . Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986*. May 4, 1987, pp. 89-110.

U.S. Department of the Treasury. *Report to the Congress on Depreciation Recovery Periods and Methods*. Washington, DC: June 2000.

DEPRECIATION ON EQUIPMENT IN EXCESS OF ALTERNATIVE DEPRECIATION SYSTEM

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	10.8	51.0	61.8
2009	5.5	25.7	31.2
2010	-1.3	-6.1	-7.4
2011	1.0	4.7	5.7
2012	2.4	11.7	14.1

Authorization

Section 167 and 168.

Description

Taxpayers are allowed to deduct the cost of acquiring depreciable assets (assets that wear out or become obsolete over a period of years) as depreciation deductions. How quickly the deductions are taken depends on the period of years over which recovery occurs and the method used. Straight-line methods allow equal deductions in each year; accelerated methods, such as declining balance methods, allow larger deductions in the earlier years.

Equipment is currently divided into six categories to be depreciated over 3, 5, 7, 10, 15, and 20 years. Double declining balance depreciation is allowed for all but the last two classes, which are restricted to 150 percent declining balance. A double declining balance method allows twice the straight-line rate to be applied in each year to the remaining undepreciated balance; a 150-percent declining balance rate allows 1.5 times the straight-line rate to be applied in each year to the remaining undepreciated balance.

At some point, the taxpayer can switch to straight-line — write off the remaining undepreciated cost in equal amounts over the remaining life.

The 1986 law also prescribed a depreciation system for the alternative minimum tax, which applies to a broader base. The alternative depreciation system requires recovery over the midpoint of the Asset Depreciation Range, using straight-line depreciation. The Asset Depreciation Range was the set of tax lives specified before 1981 and these lives are longer than the lives allowed under the regular tax system.

This tax expenditure measures the difference between regular tax depreciation and the alternative depreciation system. The tax expenditure also reflects different write-off periods and lives for assets acquired prior to the 1986 provisions. For most of these older assets, regular tax depreciation has been completed, so that the effects of these earlier vintages of equipment would be to enter them as a revenue gain rather than as a loss.

In the past, taxpayers were generally offered the choice of using the straight-line method or accelerated methods of depreciation such as double-declining balance and sum-of-years digits, in which greater amounts are deducted in the early years. Tax lives varied across different types of equipment under the Asset Depreciation Range System, which prescribed a range of tax lives. Equipment was restricted to 150-percent declining balance by the 1981 Act, which shortened tax lives to five years.

Example: Consider a $10,000 piece of equipment that falls in the five-year class (with double declining balance depreciation) with an eight-year midpoint life. In the first year, depreciation deductions would be 2/5 times $10,000, or $4,000. In the second year, the basis of depreciation is reduced by the previous year's deduction to $6,000, and depreciation would be $2400 (2/5 times $6,000).

Depreciation under the alternative system would be 1/8th in each year, or $1,250. Thus, the tax expenditure in year one would be the difference between $4,000 and $1,250, multiplied by the tax rate. The tax expenditure in year two would be the difference between $2,400 and $1,250 multiplied by the tax rate.

Fifty percent of investment in advanced mine safety equipment may be expensed from the date of enactment of the Tax Relief and Health Care Act (P. L. 109-432) in December 2006 and the provision was extended in the Emergency Economic Stabilization Act of 2008 (P.L. 110-343) enacted in October 2008.

Equipment placed into service in 2008 will be eligible for bonus depreciation, which allows half of the cost to be deducted when incurred (expensed). This one year bonus depreciation is the main reason for the revenue loss pattern, since bonus depreciation added to the tax expenditure

for accelerated depreciation by $22.8 billion in FY2008 and $6.1 billion in FY 2009, but gained revenues (a negative tax expenditure) in the amounts of $15.0 billion, $10.7 billion, and $8.4 billion in the next three years. Most of this bonus depreciation was fore corporations (a $18.4 billion, $5.0 billion expenditure forFY2008 and FY2009, and a negative expenditure of $12.4 billion, $8.8billion, and $6.9 billion for FY2010-FY2012). These bonus depreciation numbers also reflect the revenue gains that result currently from bonus depreciation effective for 2002-2004.

Impact

Because depreciation methods that are faster than straight-line allow for larger depreciation deductions in the early years of the asset's life and smaller deductions in the later years, and because shorter useful lives allow quicker recovery, accelerated depreciation results in a deferral of tax liability. It is a tax expenditure to the extent it is faster than economic (*i.e.*, actual) depreciation, and evidence indicates that the economic decline rate for equipment is much slower than that reflected in tax depreciation methods.

The direct benefits of accelerated depreciation accrue to owners of assets and particularly to corporations. The benefit is estimated as the tax saving resulting from the depreciation deductions in excess of straight-line depreciation under the alternative minimum tax. Benefits to capital income tend to concentrate in the higher-income classes (see discussion in the Introduction).

Rationale

Prior to 1954, depreciation policy had developed through administrative practices and rulings. The straight-line method was favored by IRS and generally used. Tax lives were recommended for assets through "Bulletin F," but taxpayers were also able to use a facts and circumstances justification.

A ruling issued in 1946 authorized the use of the 150-percent declining balance method. Authorization for it and other accelerated depreciation methods first appeared in legislation in 1954 when the double-declining balance and other methods were enacted. The discussion at that time focused primarily on whether the value of machinery and equipment declined faster in their earlier years.

In 1962, new tax lives for equipment assets were prescribed that were shorter than the lives existing at that time. In 1971, the Asset Depreciation Range System was introduced by regulation and confirmed through legislation. This system allowed taxpayers to use lives up to twenty percent shorter or longer than those prescribed by regulation.

In the Economic Recovery Tax Act of 1981, equipment assets were assigned fixed write-off periods which corresponded to 150-percent declining balance over five years (certain assets were assigned three-year lives). These changes were intended as a general stimulus to investment and to simplify the tax law by providing for a single write-off period. The method was eventually to be phased into a 200-percent declining balance method, but the 150-percent method was made permanent by the Tax Equity and Fiscal Responsibility Act of 1982. The current treatment was adopted as part of the Tax Reform Act of 1986, which lowered tax rates and broadened the base of the income tax.

A temporary provision allowed a write-off of 30% of the cost in the first year (for 36 months beginning September 10th, 2001), adopted in 2002 as an economic stimulus. The percentage was increased to 50% in 2003 and expired in 2004. This provision, referred to as bonus Depreciaton, was also adopted as part of the fiscal stimulus package in February 2008, and was effective for 2008.

Assessment

Evidence suggests that the rate of economic decline of equipment is much slower than the rates allowed under current law, and this provision causes a lower effective tax rate on such investments than would otherwise be the case. The effect of these benefits on investment in equipment is uncertain, although more studies find equipment somewhat responsive to tax changes than they do structures. Equipment did not, however, appear to be very responsive to the temporary expensing provisions adopted in 2003 and expanded in 2003.

The more rapid depreciation more than offsets the understatement of depreciation due to the use of historical cost basis depreciation, if inflation is at a rate of about two percent or so for most assets. Under these circumstances the effective tax rate on equipment is below the statutory tax rate and the tax rates of most assets are relatively close to the statutory rate. Thus, equipment tends to be favored relative to other assets and the tax system causes a misallocation of capital.

Some arguments are made that investment in equipment should be subsidized because it is more “high tech”; conventional economic theory suggests, however, that tax neutrality is more likely to ensure that investment is allocated to its most productive use.

Selected Bibliography

Auerbach, Alan, and Kevin Hassett. "Investment, Tax Policy, and the Tax Reform Act of 1986," *Do Taxes Matter: The Impact of the Tax Reform Act of 1986,* ed. Joel Slemrod. Cambridge, Mass: MIT Press, 1990, pp. 13-49.

Billings, B. Anthony, Buagu Musazi, and Melvin Houston, "Bonus Depreciation Tax Incentives May Not Work for Needy Firms," Tax Notes, February 11, 2008, pp 735-737.

Board of Governors of the Federal Reserve System. *Public Policy and Capital Formation*. April 1981.

Brannon, Gerard M. "The Effects of Tax Incentives for Business Investment: A Survey of the Economic Evidence," U.S. Congress, Joint Economic Committee, *The Economics of Federal Subsidy Programs,* Part 3: "Tax Subsidies." July 15, 1972, pp. 245-268.

Brazell, David W. and James B. Mackie III. "Depreciation Lives and Methods: Current Issues in the U.S. Capital Cost Recovery System," *National Tax Journal*, v. 53 (September 2000), pp. 531-562.

Break, George F. "The Incidence and Economic Effects of Taxation," *The Economics of Public Finance*. Washington, DC: The Brookings Institution, 1974.

Clark, Peter K. *Tax Incentives and Equipment Investment*, Brookings Papers on Economic Activity no. 1, 1994, pp. 317-339.

Cohen, Darryl and Jason Cummins. A Retrospective Evaluation of the Effects of Temporary Partial Expensing, Federal Reserve Board Staff Working Paper 2006-19, Washington, D.C., April, 2006.

Cummins, Jason G., Kevin Hasset and R. Glenn Hubbard. "Have Tax Reforms Affected Investment?" in James M. Poterba, *Tax Policy and The Economy*, v. 9, Cambridge: MIT Press, 1994.

— . *A Reconsideration of Investment Behavior Using Tax Reforms as Natural Experiments*, Brookings Papers on Economic Activity, no. 2, 1994, pp. 1-74.

Dunn, Wendy E., Mark E. Doms, Stephen D. Oliner, and Daniel E. Sichel. "How Fast Do Personal Computers Depreciate? Concepts and New Estimates," National Bureau of Economic Research Working Paper No. 10521, Cambridge, MA., May 2004.

Feldstein, Martin. "Adjusting Depreciation in an Inflationary Economy: Indexing Versus Acceleration," *National Tax Journal*, v. 34. March 1981, pp. 29-43.

Fullerton, Don, Robert Gillette, and James Mackie. "Investment Incentives Under the Tax Reform Act of 1986," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 131-172.

Fullerton, Don, Yolanda K. Henderson, and James Mackie. "Investment Allocation and Growth Under the Tax Reform Act of 1986," *Compendium of Tax Research 1987*, Office of Tax Analysis, Department of The Treasury. Washington, DC: U.S. Government Printing Office, 1987, pp. 173-202.

Gravelle, Jane G. "Differential Taxation of Capital Income: Another Look at the Tax Reform Act of 1986," *National Tax Journal*, v. 63. December 1989, pp. 441-464.

— . *Depreciation and the Tax Treatment of Real Estate*. Library of Congress, Congressional Research Service Report RL30163. Washington, DC: October 25, 2000.

— . *Economic Effects of Taxing Capital Income*, Chapters 3 and 5. Cambridge, MA: MIT Press, 1994.

— . "Whither Tax Depreciation?" *National Tax Journal*, vol. 54, September, 2001, pp. 513-526.

Harberger, Arnold, "Tax Neutrality in Investment Incentives," *The Economics of Taxation,* eds. Henry J. Aaron and Michael J. Boskin. Washington, DC: The Brookings Institution, 1980, pp. 299-313.

Hendershott, Patric and Sheng-Cheng Hu, "Investment in Producers' Durable Equipment," *How Taxes Affect Economic Behavior*, eds. Henry J. Aaron and Joseph A. Pechman. Washington, DC: The Brookings Institution, 1981, pp. 85-129.

House, Christopher and Matthew Shapiro, *Temporary Investment Tax Incentives: Theory With Evidence from Bonus Depreciation*, National Bureau of Economic Research Working Paper 12514,Cambridge, MA., September 2006.

Hulten, Charles, ed. *Depreciation, Inflation, and the Taxation of Income From Capital*. Washington, DC: The Urban Institute, 1981.

Hulten, Charles R., and Frank C. Wykoff. "Issues in Depreciation Measurement." *Economic Inquiry*, v. 34, January 1996, pp. 10-23.

Jorgenson, Dale W. "Empirical Studies of Depreciaton." *Economic Inquiry*, v. 34, January 1996, pp. 24-42.

Knittel, Matthew. *Corporate Response to Bonus Depreciation: Bonus Depreciation for Tax Years 2002-2004*, U.S. Department of Treasury, Office of Tax Analysis Working Paper 98, May 2007.

Mackie, James. "Capital Cost Recovery," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Nadiri, M. Ishaq, and Ingmar R. Prucha. "Depreciation Rate Estimation of Physical and R&D Capital." *Economic Inquiry*, v. 34, January 1996, pp. 43-56.

Oliner, Stephen D. "New Evidence on the Retirement and Depreciation of Machine Tools." *Economic Inquiry*, v. 34, January 1996, pp.57-77.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986.* May 4, 1987, pp. 89-110.

U.S. Department of the Treasury. *Report to the Congress on Depreciation Recovery Periods and Methods*. Washington, DC: June 2000.

EXPENSING OF DEPRECIABLE BUSINESS PROPERTY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	4.4	1.0	5.4
2009	4.1	1.0	5.1
2010	2.0	0.5	2.5
2011	-0.5	-0.1	-0.6
2012	-5.8	-1.4	-7.2

Authorization

Section 179.

Description

Within certain limitations, a business taxpayer (other than a trust or estate) may deduct as a current expense (or expense) a specified amount of the cost of qualifying depreciable property in the tax year when it is placed in service. In 2008, the maximum expensing allowance is $250,000. (The allowance is higher for firms located in so-called Enterprise and Empowerment Zones, Renewal Communities, the areas affected by Hurricane Katrina, the portion of Manhattan directly affected by the terrorist attacks of September 11, 2001, and all federally declared disaster from January 1, 2008 through December 31, 2009.) Under current federal tax law, the allowance is to remain at or above $100,000 from May 2003 through the end of 2010. Beginning in 2011 and each year thereafter, the maximum expensing allowance is scheduled to drop to $25,000. Firms that cannot take advantage of the expensing allowance are required to recover the cost of the same assets over a longer period using current depreciation schedules.

For the most part, qualifying property is new and used machinery, equipment, and computer software purchased for use in a trade or business. Software is eligible for expensing only from 2003 through 2009. With some exceptions, buildings and their structural components do not qualify for the allowance.

The amount that may be expensed is subject to two important limitations: a dollar limitation and an income limitation. Under the former, the maximum expensing allowance is reduced, dollar for dollar, by the amount by which the total cost of qualifying property placed in service in a tax year from 2003 through 2009 exceeds a threshold of not less than $400,000 (an amount that is also known as the phase-out threshold). In 2008, this threshold is set at $800,000. (This threshold is higher for firms located in Empowerment and Enterprise Zones, Renewal Communities, the areas affected by Hurricane Katrina, the portion of Manhattan affected by the terrorist attacks of September 11, 2001, and federally declared disaster areas in 2008 and 2009.) Beginning in 2011 and beyond, the threshold will drop to $200,000. Because of the dollar limitation, none of the cost of qualifying property may be expensed in 2008 once the total cost reaches $1,050,000. Under the income limitation, the expensing allowance may not exceed a business taxpayer's taxable income from the active conduct of the trade or business in which the qualifying property is used. Business taxpayers may not carry forward any expensing allowances lost because of the dollar limitation, but they may carry forward any allowances lost because of the income limitation.

Impact

In the absence of section 179, the cost of qualified assets would have to be recovered over longer periods. Thus, the provision greatly accelerates the depreciation of relatively small purchases of those assets. This effect has important implications for business investment. Expensing can boost the cash flow of firms able to take advantage of it, as the present value of the taxes owed on the stream of income earned by a depreciable asset shrinks as the rate of depreciation increases. Expensing also is equivalent to taxing the income earned from eligible business assets at a marginal effective tax rate of zero.

The allowance offers another benefit to firms able to take advantage of it: it simplifies their tax accounting.

Because the allowance has a phase-out threshold, most of the firms that take advantage of it tend to be relatively small in asset, employment, or revenue size.

Benefits to capital income tend to concentrate in the higher income classes (see discussion in the Introduction).

Rationale

The expensing allowance originated as a special first-year depreciation deduction that originated with the Small Business Tax Revision Act of 1958. The deduction was equal to 20 percent of the first $10,000 of spending ($20,000 in the case of a joint return) on new and used business equipment and machinery with a depreciation life of six or more years. It was intended to provide tax relief and an investment incentive for small firms, and to simplify their tax accounting.

The deduction remained intact until the Economic Recovery Tax Act of 1981 (ERTA) replaced it with a maximum expensing allowance of $5,000. ERTA also established a timetable for increasing the allowance to $10,000 by 1986 and an investment tax credit. Business taxpayers were not permitted to claim both the allowance and the credit for acquisitions of the same assets. As a result, relatively few firms took advantage of the allowance until the Tax Reform Act of 1986 repealed the investment tax credit.

A provision of the Deficit Reduction Act of 1984, postponed the scheduled increase in the maximum allowance to $10,000 from 1986 to 1990. The allowance did increase to $10,000 in 1990, as scheduled.

It remained at that amount until 1993, when President Clinton proposed a temporary investment credit for equipment for large firms and a permanent one for small firms. The credits were not adopted, but the Omnibus Budget Reconciliation Act of 1993 increased the expensing allowance to $17,500, as of January 1, 1993.

With the enactment of the Small Business Job Protection Act of 1996, the size of the allowance embarked on an accelerated upward path: it rose to $18,000 in 1997, $18,500 in 1998, $19,000 in 1999, $20,000 in 2000, $24,000 in 2001 and 2002, and $25,000 in 2003 and each year thereafter.

The maximum allowance would still be $25,000, were it not for the enactment of the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA). The act made three important changes in the allowance. First, it raised the maximum amount that can be expensed to $100,000 and the phase-out threshold to $400,000, for 2003 through 2005. Second, JGTRRA indexed both amounts for inflation in 2004 and 2005. Finally, it added purchases of off-the-shelf computer software for business use to the list of assets eligible for expensing in 2003 through 2005.

Under the American Jobs Creation Act of 2004, all the changes in the allowance made by JGTRRA are extended through 2007.

The Tax Increase Prevention and Reconciliation Act of 2005 extended these changes through 2009.

In passing the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Appropriations Act, 2007, Congress raised the maximum allowance to $125,000 and the phaseout threshold to $500,000 in 2007 to 2010 and indexed both amounts for inflation in 2008 to 2010.

The Economic Stimulus Act of 2008 increased the allowance to $250,000 and the phaseout threshold to $800,000 in 2008 only.

Assessment

The expensing allowance under section 179 has important implications for tax administration and economic efficiency. With regard to the former, it simplifies tax accounting for firms able to take advantage of the allowance. With regard to the latter, the provision encourages increased investment in a limited set of assets by smaller firms in a way that could divert financial capital away from more productive uses. Nonetheless, its overall influence on tax administration and the allocation of economic resources is probably modest at best because most large firms are unable to use the allowance.

Although some argue that investment by smaller firms should be fostered because they tend to create more jobs and generate more technological innovation than larger firms, evidence on this issue is inconclusive. In addition, conventional economic analysis offers no support for investment tax subsidies targeted at such firms. In theory, taxing the returns to all investments at the same rate does less harm to social welfare than does tying the tax rate on those returns to a firm's size.

Some question the efficacy of expensing as a policy tool for encouraging higher levels of business investment. A more fruitful approach, in the view of these skeptics, would be to enact permanent reductions in corporate and individual tax rates.

The economic effects of expensing may receive greater congressional consideration in the next year or two. In November 2005, an advisory panel on federal tax reform established by President George W. Bush issued its final report. After evaluating a number of reform proposals, the panel recommended two reform plans: the "Simplified Income Tax Plan" and the Growth and Investment Tax (GIT) Plan." While both plans would modify the current rules governing the tax treatment of depreciation, only the GIT Plan would allow all new investments by firms of all sizes to be expensed.

Selected Bibliography

Billings, B. Anthony, Buagu Musazi, and Melvin Houston. "Bonus Depreciation Tax Incentives May Not Work for Needy Firms," *Tax Notes*, February 11, 2008, pp. 735-737.

Cahlin, Richard A. "Current Deduction Available for Many Costs That Are Capital in Nature," *Taxation for Accountants*, v. 29. November 1982, pp. 292-295.

Cash, Stephen L. and Thomas L. Dickens, "Depreciation After the 2003 Tax Act — Part 1: Taxes," *Strategic Finance*, October 1, 2003, p. 17.

Cohen, Darrel and Jason Cummings. *A Retrospective Evaluation of the Effects of Temporary Partial Expensing*, Finance and Economics Discussion Series report 2006-19, Federal Reserve Board, Washington, DC.

Cordes, Joseph J., "Expensing," in *The Encyclopedia of Taxation and Tax Policy*, Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, eds., Washington, DC: Urban Institute Press,1999, p. 114.

Gaffney, Dennis J., Maureen H. Smith-Gaffney, and Bonnie M. Moe, "JGTRRA Increases in Accelerated Capital Recovery Provisions Are Generally Taxpayer Friendly," *Journal of Taxation*, July, 2003, p. 20.

Gravelle, Jane G. *Small Business Tax Subsidy Proposals*, Library of Congress, Congressional Research Service Report 93-316. Washington, DC: March 15, 1994.

Guenther, Gary. *Small Business Expensing Allowance: Current Status, Legislative Proposals, and Economic Effects*, Library of Congress, Congressional Research Service, Report RL31852, Washington, DC: September 8, 2008.

Holtz-Eakin, Doug. "Should Small Business be Tax-Favored?" *National Tax Journal*, v. 48, September 1995, pp. 447-462.

Knittel, Matthew. *Corporate Response to Accelerated Tax Depreciation: Bonus Depreciation for Tax Years 2002-2004*, OTA Working Paper 98, Office of Tax Analysis, Department of the Treasury, Washington, DC: May 2007.

Neubig, Tom. "Where's the Applause? Why Most Corporations Prefer a Lower Rate." *Tax Notes,* April 24, 2006. pp. 483-486.

President's Advisory Panel on Federal Tax Reform. *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System*. Washington, DC: November 2005.

U.S. Congress, Senate Committee on Finance hearing 104-69. *Small Business Tax Incentives*. Washington, DC: U.S. Government Printing Office, June 7, 1995.

AMORTIZATION OF BUSINESS START-UP COSTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.8	([1])	0.8
2009	0.9	([1])	0.9
2010	0.9	([1])	0.9
2011	1.0	([1])	1.0
2012	1.0	([1])	1.0

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 195.

Description

In general, business taxpayers are allowed to deduct all normal and reasonable expenses they incur in conducting their trade or business. This rule implies that costs incurred before the start of a business should not be deducted as a current expense because they were not incurred in connection with carrying on an active trade or business. If anything, start-up costs should be capitalized and added to a taxpayer's basis in the business. Yet under section 195, a business taxpayer may deduct up to $5,000 in qualified start-up expenditures. This limit is reduced dollar-for-dollar when these expenses exceed $50,000. As of October 22, 2004, any remaining start-up expenses must be amortized over a period of not less than 15 years, beginning with the month in which the business commences.

If a business owner disposes of a trade or business before the end of the 15-year period, any remaining deferred expenses can be deducted as a loss under section 165.

Start-up expenditures must satisfy two requirements to qualify for this preferential treatment. First, they must be paid or incurred with respect to one or more of the following activities: looking into the creation or acquisition of an active trade or business; creating an active trade or business; or engaging in what the Internal Revenue Service (IRS) deems "a profit-seeking or income-producing activity" before an active trade or business commences. Second, the expenditures must resemble costs that would be deductible if they were paid or incurred in connection with an existing trade or business. Excluded from qualifying start-up expenditures are interest payments on debt, tax payments, and spending on research and development that is deductible under section 174.

Impact

The election to deduct and amortize business start-up costs removes an impediment to the formation of new businesses by permitting the immediate deduction of expenses that otherwise could not be recovered until the owner sold his or her interest in the business.

Benefits to capital income tend to concentrate in the higher income classes (see discussion in the Introduction).

Rationale

Before the enactment of section 195 in 1980, the question of whether an expense incurred in connection with starting a new trade or business could be deducted as a current expense or should be capitalized was a longstanding source of controversy and costly litigation between business taxpayers and the IRS. Business taxpayers had the option of treating certain organizational expenditures for the formation of a corporation or partnership as deferred expenses and amortizing them over a period of not less than 60 months (Code sections 248 and 709).

Section 195 entered the federal tax code through the Miscellaneous Revenue Act of 1980. The original provision allowed business taxpayers to amortize start-up expenditures over a period of not less than 60 months. It defined start-up expenditures as any expense "paid or incurred in connection with investigating the creation or acquisition of an active trade or business, or creating an active trade or business." In addition, the expense had to be one that would have been immediately deductible if it were paid or incurred in connection with the expansion of an existing trade or business. Congress added section 195 to facilitate the creation of new businesses and reduce the

frequency of protracted legal disputes over the tax treatment of start-up expenditures.

Nevertheless, numerous disputes continued to arise over whether certain business start-up costs should be expensed under section 162, capitalized under section 263, or amortized under section 195. In another attempt to quell the controversy and curtail the litigation surrounding the interpretation of section 195, Congress added a provision to the Deficit Reduction Act of 1984 clarifying the definition of start-up expenditures. It required taxpayers to treat start-up expenditures as deferred expenses, which meant that they were to be capitalized unless a taxpayer elected to amortize them over 60 or more months. It also broadened the definition of start-up expenditures to include expenses incurred in anticipation of entering a trade or business.

No further changes were made in section 195 until the enactment of the American Jobs Creation Act of 2004. The act included a provision limiting the scope of the amortization of business start-up costs under prior law. Specifically, the provision permitted business taxpayers to deduct up to $5,000 in eligible start-up costs in the tax year when their trade or business began. This amount had to be reduced (but not below zero) by the amount by which these costs exceeded $50,000. Any remaining amount had to be amortized over 15 years, beginning with the month in which the active conduct of the trade or business commenced. The definition of start-up costs was left unchanged. In making these changes, Congress seemed to have two intentions. One was to encourage the formation of new firms that do not require substantial start-up costs by allowing a large share of those costs to be deducted in the tax year when they begin to operate. The second aim was to make the amortization period for start-up costs consistent with that for intangible assets under section 197, which is 15 years.

Assessment

In theory, business start-up costs should be written off over the life of the business on the grounds that they are a capital expense. Such a view, however, does pose the difficult challenge of determining the useful life of a business at its outset.

Section 195 has two notable advantages as a means of addressing this challenge. First, it makes costly and drawn-out legal disputes involving business taxpayers and the IRS over the tax treatment of start-up costs less likely. Second, it does so at a relatively small revenue cost.

Selected Bibliography

Burgess, J.W. and William L. Raby. "Start-up Costs," *Tax Notes*, February 12, 2007, pp. 661-664.

Davis, Jon E., "Amortization of Start-Up Costs," *Tax Adviser*, April 1999, p. 222.

Fiore, Nicholas J., "IRS Issues Guidance on Amortizable Start-Up Cost," *Tax Adviser*, July 1999, pp. 527-532.

Garris, Henry A., "Update and Review of Start-Up Expenditures," *CPA Journal*, March 1991, p. 60.

Guenther, Gary. *Small Business Tax Benefits: Overview and Economic Analysis*, Library of Congress, Congressional Research Service Report RL32254, Washington, DC: March 3, 2008.

Internal Revenue Service, *Starting a Business and Keeping Records*, publication 583, Washington, D.C.: March 2006.

Kalinka, Susan, "When Will Business Investigatory Expenditures Be Amortizable Start-Up Costs?," *Taxes*, September 1998, pp. 5-9.

Kline, Robin, "Disallowed Start-Up Expenses," *Tax Adviser*, October 1998, pp. 666-667.

Maples, Larry, and Melanie James Earles. "How to Scale the Deduction Barriers," *Journal of Accountacy*, November 2000, pp. 69-76.

Paul, Michael S., "Elect to Amortize Nondeductible Start-Up Expenses," *Taxation for Accountants*, August 1995, pp. 68-73.

Persellin, Mark B. and Shawn E. Novak, "Start-Up Expenditures: Compliance and Planning Issues," *Journal of Corporate Taxation*, Summer 1995, p. 141.

Schnee, Edward J., "Speed Up the Deduction of Business Expansion Costs," *Practical Tax Strategies*, July 1999, pp. 4-11.

Thornton, David A., "IRS Clarifies the Applicability of Section 195 to Business Acquisitions," *Tax Adviser*, September 1999, pp. 625-626.

U.S. Congress, House Committee on Ways and Means. *Miscellaneous Revenue Act of 1980.* Report 96-1278, pp. 9-13.

— , Senate Committee on Finance. *Jumpstart Our Business Strength (Jobs) Act*. Report 108-192, pp. 196-197.

— , Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Committee Print, 98th Congress, 2nd Session, December 31, 1984, pp. 295-297.

Wilcox, Gary B. "Start-Up Cost Treatment Under Section 195: Tax Disparity in Disguise," *Oklahoma Law Review*, v. 36. Spring 1983, pp. 449-466.

REDUCED RATES ON FIRST $10,000,000 OF CORPORATE TAXABLE INCOME

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	3.3	3.3
2009	([1])	3.3	3.3
2010	([1])	3.2	3.2
2011	([1])	3.2	3.2
2012	([1])	3.2	3.2

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 11.

Description

Corporations with less than $10 million in taxable income are taxed according to a graduated rate structure. The tax rate is 15 percent on the first $50,000 of income, 25 percent on the next $25,000, and an average of 34 percent thereafter. To offset the benefit from the lower rates, a tax rate of 39 percent is imposed on corporate taxable income between $100,000 and $335,000. As a result, the benefit of the lower rates disappears for corporations with taxable income in excess of $335,000; in fact, they pay a flat average rate of 34 percent. The tax rate on taxable income between $335,000 and $10 million is 34 percent. It rises to 35 percent for taxable income from $10 million to $15 million. When taxable income falls between $15 million and $18,333,333, the rate jumps to 38 percent. Finally, a flat rate of 35 percent applies to taxable income above $18,333,333.

Consequently, the benefit of the 34 percent rate is lost when income reaches $18,333,333.

The graduated rates do not apply to the taxable income of personal-service corporations; instead, it is taxed at a flat rate of 35 percent. In addition, there are restrictions on eligibility for the lower rates to prevent abuse by related corporations.

The tax expenditure for section 11 lies in the difference between taxes paid and the taxes that would be paid if all corporate income were taxed at a flat 35 percent rate.

Impact

The lower rates mainly affect smaller corporations. This is because the graduated rate structure limits the benefits of the rates under 35 percent to corporations with taxable incomes below $335,000.

The graduated rates encourage firms to use the corporate form of legal organization and allow some small corporations that might otherwise operate as passthrough entities (e.g., sole proprietorships or partnerships) to provide fringe benefits. They also encourage the splitting of operations between sole proprietorships, partnerships, S corporations and regular C corporations. Most businesses are not incorporated; so only a small fraction of firms are affected by this provision. In 2005, the most recent year for which comprehensive business tax return data are available, C corporations accounted for 6 percent of all business tax returns.[19] Most of these corporations benefit from the reduced rates.

This provision is likely to benefit higher-income individuals who are the primary owners of capital (see Introduction for a discussion).

Rationale

In the early years of the corporate income tax, exemptions from the tax were allowed in some years. A graduated rate structure was first adopted in 1936. From 1950 to 1974, corporate income was subject to a "normal tax" and a surtax; the first $25,000 of income was exempt from the surtax. The exemption was intended to provide tax relief for small businesses.

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[19]U.S. Congress, Joint Committee on Taxation, *Tax Reform: Selected Federal Tax Issues Relating to Small Business and Choice of Entity*, JCX-48-08 (Washington: June 4, 2008), p. 8.

Not surprisingly, this dual structure led many large firms to reorganize - their operations into smaller corporations in order to avoid paying the surtax. Some steps to remedy this loophole were taken in 1963. But the most important correction came in 1969, when legislation was enacted that limited clusters of corporations controlled by the same interest to a single exemption.

In 1975, a graduated rate structure with three brackets was adopted. In 1984, a law was enacted which included a provision phasing out the exemption for taxable incomes between $1 million and $1.405 million. The act also lowered the rates that applied to incomes up to $100,000.

The present graduated rate structure for corporate taxable income below $10 million came into being with the passage of the Tax Reform Act of 1986. Among other things, the act lowered the ceilings on the rates and accelerated the phase-out of the reduced rates so that their benefits phased out between $100,000 and $335,000. In taking these steps, Congress was attempting to target the benefits of the graduated rate structure more precisely at smaller firms. Hoping to reduce a large and growing budget deficit by raising revenue, Congress added the 35-percent corporate tax rate through the Omnibus Budget Reconciliation Act of 1993.

Assessment

A principal justification for the graduated rates is that they encourage the growth of small entrepreneurial firms. The reduced rates lower their cost of capital for new investments and provide welcome tax relief at a time when many of them struggle to survive. They were also originally intended to lessen the burden of the double taxation of corporate earnings. But can the graduated rates be justified on economic grounds?

They are difficult to justify on equity grounds. Unlike the graduated rates of the individual tax, the corporate graduated rate structure have nothing to do with a firm's ability to pay: it is individuals and not corporations who end up paying corporate taxes.

Can the graduated rate structure be justified on the grounds that it improves economic efficiency? Once again, it is difficult to make a convincing case. Although some argue that government policy should support investment by small firms because they tend to create more jobs and generate more technological innovations than larger firms, evidence on this issue is decidedly mixed and inconclusive. In theory, economic resources are likely to migrate to their most productive uses when the tax treatment of the returns to all investments is the same. A graduated rate structure encourages higher levels of investment by smaller corporations than would be the case if all corporate profits were taxed at a flat rate of 35 percent. Graduated rates also give large corporations an incentive to operate for tax purposes as multiple smaller units, where economies of scale have less of an

impact on the returns to investment. And under a graduated rate structure, owners of small corporations an incentive are more likely to shelter income by retaining earnings rather than paying them out as dividends.

Graduated rates do have the advantage of making it possible for owners of businesses in the lower income brackets to operate as corporations. Generally, business owners are free to operate their firms as a regular C corporation or some kind of passthrough entity (i.e., sole proprietorship, partnership, limited liability company, or S corporation) for tax purposes. Income earned by passthrough entities is attributed to the owners (whether or not it is distributed) and taxed at individual income tax rates. Depending on the amount, it is possible for income earned by corporations to be taxed at lower rates than income earned by passthrough entities. Differences between the two rates create opportunities for sheltering income in corporations. There may be some circumstances, however, where operating as a passthrough entity is not feasible. For instance, a firm must operate as a C corporation if it wants to issue more than one class of stock or offer employee fringe benefits that are eligible for favorable tax treatment.

The reduced corporate rates also make it likely that small corporations will rely more on equity than debt to finance investments.

Selected Bibliography

Armington, Catherine, and Marjorie Odle. "Small Business — How Many Jobs?" *Brookings Review*, v. 1, no. 2. Winter 1982, pp. 14-17.

Gravelle, Jane G. *Small Business Tax Subsidy Proposals*. Library of Congress, Congressional Research Service Report 93-316. Washington, DC: March 15, 1994.

-. "The Corporate Income Tax: Where Has It Been and Where Is It Going?." *National Tax Journal*, vol. 57, December 2004. pp. 903-923.

Guenther, Gary. *Small Business Tax Benefits: Overview and Economic Analysis*. Library of Congress, Congressional Research Service Report RL32254. Washington, DC: March 3, 2008.

Holtz-Eakin, Douglas. "Should Small Business be Tax-Favored?" *National Tax Journal*, v. 48, September 1995, pp. 447-462.

Marples, Donald J. *Federal Business Taxation: The Current System, Its Effects, and Options for Reform.* Library of Congress, Congressional Research Service Report RL33171. Washington, DC: March 12, 2008.

Pechman, Joseph A. *Federal Tax Policy*. Washington, DC: The Brookings Institution, 1987, pp. 302-305.

Plesko, George A. "`Gimme Shelter?' Closely Held Corporations Since Tax Reform," *National Tax Journal*, v. 48. September 1995, pp. 409-416.

Schnee, Edward J. "Refining the Definition of a Personal Service Corporation." *Journal of Accountancy*, vol. 202, no. 3, September 1, 2006. p. 74

U.S. Congress, Congressional Budget Office. *Budget Options*,. Washington, DC: February 2007, p. 298.

— , Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986*, 99th Congress, 2nd session. May 4, 1987: pp. 271-273.

— , Senate Committee on Finance hearing 104-69. *Small Business Tax Incentives*. Washington, DC: U.S. Government Printing Office, June 7, 1995.

U.S. Department of the Treasury. *Tax Reform for Fairness, Simplicity, and Economic Growth*, v. 2, *General Explanation of the Treasury Department Proposals*. November, 1974, pp. 128-129.

PERMANENT EXEMPTION FROM IMPUTED INTEREST RULES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.5	([1])	0.5
2009	0.5	([1])	0.5
2010	0.5	([1])	0.5
2011	0.5	([1])	0.5
2012	0.6	([1])	0.6

([1])less than $50 million

Authorization

Sections 163(e), 483, 1274, and 1274A.

Description

The failure to report interest as it accrues can allow the deferral of taxes. The tax code generally requires that debt instruments bear a market rate of interest at least equal to the average rate on outstanding Treasury securities of comparable maturity. If an instrument does not, the Internal Revenue Service imputes a market rate to it. The imputed interest must be included as income to the recipient and is deducted by the payer.

There are several exceptions to the general rules for imputing interest on debt instruments. Debt associated with the sale of property when the total sales price is no more than $250,000, the sale of farms or small businesses by individuals when the sales price is no more than $1 million, and the sale of a personal residence, is not subject to the imputation rules at all. Debt instruments for amounts not exceeding an inflation-adjusted maximum

(about $4.6 million or $3.3 million, depending on the kind of the debt instrument), given in exchange for real property, may not have imputed to them an interest rate greater than 9 percent.

This tax expenditure is the revenue loss in the current year from the deferral of taxes caused by these exceptions.

Impact

The exceptions to the imputed interest rules are generally directed at "seller take-back" financing, in which the seller of the property receives a debt instrument (note, mortgage) in return for the property. This is a financing technique often used in selling personal residences or small businesses or farms, especially in periods of tight money and high interest rates, both to facilitate the sales and to provide the sellers with continuing income.

This financing mechanism can also be used, however, to shift taxable income between tax years and thus delay the payment of taxes. When interest is fully taxable but the gain on the sale of the property is taxed at reduced capital gains rates, as in current law, taxes can be eliminated, not just deferred, by characterizing more of a transaction as gain and less as interest (that is, the sales price could be increased and the interest rate decreased).

With only restricted exceptions to the imputation rules, and other recent tax reforms, the provisions now cause only modest revenue losses and have relatively little economic impact.

Rationale

Restrictions were placed on the debt instruments arising from seller-financed transactions beginning with the Revenue Act of 1964, to assure that taxes were not reduced by manipulating the purchase price and stated interest charges. These restrictions still allowed considerable creativity on the part of taxpayers, however, leading ultimately to the much stricter and more comprehensive rules included in the Deficit Reduction Act of 1984.

The 1984 rules were regarded as very detrimental to real estate sales and they were modified almost immediately (temporarily in 1985 [P.L. 98-612] and permanently in 1986 [P.L. 99-121]). The exceptions to the imputed interest rules described above were introduced in 1984 and 1986 (P.L. 99-121) to allow more flexibility in structuring sales of personal residences, small businesses, and farms by the owners, and to avoid the administrative problems that might arise in applying the rules to other smaller sales.

Assessment

The imputed interest and related rules dealing with property-for-debt exchanges were important in restricting unwarranted tax benefits before the Tax Reform Act of 1986 eliminated the capital gains exclusion and lengthened the depreciable lives of buildings.

Under pre-1986 law, the seller of commercial property would prefer a higher sales price with a smaller interest rate on the associated debt, because the gain on the sale was taxed at lower capital gains tax rates. The buyer would at least not object to, and might prefer, the same allocation because it increased the cost of property and the amount of depreciation deductions (*i.e.*, the purchaser could deduct the principal, through depreciation deductions, as well as the interest). It was possible to structure a sale so that both seller and purchaser had more income at the expense of the government.

Under current depreciation rules and low interest rates, this allocation is much less important. In addition, the 9-percent cap on imputed interest for some real estate sales has no effect when market interest rates are below that figure.

Selected Bibliography

Internal Revenue Service. *Installment Sales*. Publication 537, for use in preparing 2007 returns, pp. 10, 11.

U.S. Congress, Joint Committee on Taxation. *Description of the Tax Treatment of Imputed Interest on Deferred Payment Sales of Property*, JCS-15-85. May 17, 1985.

— . *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*, JCS-41-84. December 31, 1984, pp.108-127.

EXPENSING OF MAGAZINE CIRCULATION EXPENDITURES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([2])
2009	([1])	([1])	([2])
2010	([1])	([1])	([2])
2011	([1])	([1])	([2])
2012	([1])	([1])	([2])

([1]) Positive tax expenditure of less than $50 million
([2]) Positive tax expenditure of less than $100 million

Authorization

Section 173.

Description

In general, current federal tax law allows publishers of newspapers, magazines, and other periodicals to deduct their expenditures to maintain, establish, or increase circulation in the year when they are made.

Deductions of these expenditures as current expenses are permitted, even though expenditures to establish or increase circulation would otherwise be treated as capital expenditures under section 263. The expenditures eligible for this preferential treatment do not include purchases of land and depreciable property, or the expansion of circulation through the purchase of another publisher or its list of subscribers.

The tax expenditure in section 173 arises from the difference between the deduction of costs as current expenses and the present value of the depreciation deductions that would be taken if the costs were capitalized.

Impact

Deducting circulation costs as a current expense speeds up the recovery of those costs. This acceleration in turn increases cash flow and reduces the cost of capital for publishers. Investment in maintaining and expanding circulation is a key element of the competitive strategies for publishers of newspapers and magazines. Readers obviously are an important source of revenue, and the advertising rates publishers charge typically are based on the volume of sales and readership.

Like many other business tax expenditures, the benefit tends to accrue to high-income individuals (see Introduction for a discussion).

Rationale

Section 173 was added to the federal tax code through the Revenue Act of 1950. In taking this step, Congress wanted to eliminate some of the difficulties associated with distinguishing between expenditures to maintain circulation, which had been treated as currently deductible, and those to establish or develop new circulation, which had to be capitalized. Numerous legal disputes between publishers and the Internal Revenue Service over the application and interpretation of this distinction had arisen as far back as the late 1920s.

The treatment of circulation expenses under section 173 remained unchanged until the passage of the Tax Equity and Fiscal Responsibility Act of 1982. Among other things, the act made the expensing of circulation expenditures a preference item under the alternative minimum tax (AMT) for individuals and required individuals paying the AMT to amortize any such expenditures over 10 years. Congress lowered the recovery period to three years in the Deficit Reduction Act of 1984, where it now stands. The Tax Reform Act of 1986 further clarified the treatment of circulation expenditures under the AMT: it allowed taxpayers who recorded a loss on the disposition of property related to such expenditures (e.g., a newspaper) to claim as a deduction against the AMT all circulation expenditures that had not already been deducted against the tax.

Assessment

Section 173 provides a significant tax benefit for publishers in that it allows them to expense the acquisition of an asset (i.e., lists of subscribers) that seems to yield returns in more years than one. At the same time, it simplifies tax compliance and accounting for them and tax administration for the IRS. Without such treatment, it would be necessary for IRS or Congress

to clarify how to distinguish between expenditures for establishing or expanding circulation and expenditures for maintaining circulation.

Selected Bibliography

Commerce Clearing House. "'50 Act Clarified Tax Treatment of Circulation Expenses of Publishers," *Federal Tax Guide Reports*, v. 48. September 9, 1966, p. 2.

Davidson, James H. "A Publisher's Guide to Tax Reform — Part 2," *Folio: The Magazine for Magazine Management*, February 1987.

U.S. Congress, Joint Committee on Internal Revenue Taxation. Summary of H.R. 8920, "The Revenue Act of 1950," as agreed to by the Conferees. September 1950, p. 12.

Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*, Committee Print, 98th Congress, 2nd session. December 31, 1984, p. 986

— , *General Explanation of the Tax Reform Act of 1986*, Committee Print, 99th Congress, 2nd Session, May 4, 1987, p. 445.

SPECIAL RULES FOR MAGAZINE, PAPERBACK BOOK, AND RECORD RETURNS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1])Less than $50 million.

Authorization

Section 458.

Description

In general, if a buyer returns goods to the seller, the seller's income is reduced in the year in which the items are returned. If the goods are returned after the tax year in which the goods were sold, the seller's income for the previous year is not affected.

An exception to the general rule has been granted to publishers and distributors of magazines, paperbacks, and records, who may elect to exclude from gross income for a tax year the income from the sale of goods that are returned after the close of the tax year. The exclusion applies to magazines that are returned within two months and fifteen days after the close of the tax year, and to paperbacks and records that are returned within four months and fifteen days after the close of the tax year.

To be eligible for the special election, a publisher or distributor must be under a legal obligation, at the time of initial sale, to provide a refund or credit for unsold copies.

Impact

Publishers and distributors of magazines, paperbacks, and records who make the special election are not taxed on income from goods that are returned after the close of the tax year. The special election mainly benefits large publishers and distributors.

Rationale

The purpose of the special election for publishers and distributors of magazines, paperbacks, and records is to avoid imposing a tax on accrued income when goods that are sold in one tax year are returned after the close of the year.

The special rule for publishers and distributors of magazines, paperbacks, and records was enacted by the Revenue Act of 1978.

Assessment

For goods returned after the close of a tax year in which they were sold, the special exception allows publishers and distributors to reduce income for the previous year. Therefore, the special election is inconsistent with the general principles of accrual accounting.

The special tax treatment granted to publishers and distributors of magazines, paperbacks, and records is not available to producers and distributors of other goods. On the other hand, publishers and distributors of magazines, paperbacks, and records often sell more copies to wholesalers and retailers than they expect will be sold to consumers.

One reason for the overstocking of inventory is that it is difficult to predict consumer demand for particular titles. Overstocking is also used as a marketing strategy that relies on the conspicuous display of selected titles. Knowing that unsold copies can be returned, wholesalers and retailers are more likely to stock a larger number of titles and to carry more copies of individual titles.

For business purposes, publishers generally set up a reserve account in the amount of estimated returns. Additions to the account reduce business income for the year in which the goods are sold. For tax purposes, the

special election for returns of magazines, paperbacks, and records is similar, but not identical, to the reserve account used for business purposes.

Selected Bibliography

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Act of 1978*, 95th Congress, 2nd session. March 12, 1979, pp. 235-41.

— , *Tax Reform Proposals: Accounting Issues*, Committee Print, 99th Congress, 1st session. September 13, 1985.

U.S. Department of the Treasury, Internal Revenue Service. "Certain Returned Magazines, Paperbacks or Records," *Federal Register*, v. 57, August 26, 1992, pp. 38595-38600.

COMPLETED CONTRACT RULES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.5	0.5
2009	([1])	0.5	0.5
2010	([1])	0.6	0.6
2011	([1])	0.6	0.6
2012	([1])	0.7	0.7

([1])Less than $50 million

Authorization

Section 460.

Description

Some taxpayers with construction or manufacturing contracts extending for more than one tax year are allowed to report some or all of the profit on the contracts under special accounting rules rather than the normal rules of tax accounting. Many such taxpayers use the "completed contract" method.

A taxpayer using the completed contract method of accounting reports income on a long-term contract only when the contract has been completed. All costs properly allocable to the contract are also deducted when the contract is completed and the income reported, but many indirect costs may be deducted in the year paid or incurred. This mismatching of income and expenses allows a deferral of tax payments that creates a tax advantage in this type of reporting.

Most taxpayers with long-term contracts are not allowed to use the completed contract method and must capitalize indirect costs and deduct them only when the income from the contract is reported. There are exceptions, however. Home construction contracts may be reported according to the taxpayer's "normal" method of accounting and allow current deductions for costs that others are required to capitalize.

Other real estate construction contracts may also be subject to these more liberal rules if they are of less than two years' duration and the contractor's gross receipts for the past three years have averaged $10 million or less. Contracts entered into before March 1, 1986, if still ongoing, may be reported on a completed contract basis, but with full capitalization of costs.

Contracts entered into between February 28, 1986, and July 11, 1989, and residential construction contracts other than home construction may be reported in part on a completed contract basis, but may require full cost capitalization. This tax expenditure is the revenue loss from deferring the tax on those contracts still allowed to be reported under the more liberal completed contract rules.

Impact

Use of the completed contract rules allows the deferral of taxes through mismatching income and deductions because they allow some costs to be deducted from other income in the year incurred, even though the costs actually relate to the income that will not be reported until the contract's completion, and because economic income accrues to the contractor each year he works on the contract but is not taxed until the year the contract is completed. Tax deferral is the equivalent of an interest-free loan from the Government of the amount of the deferred taxes. Because of the restrictions now placed on the use of the completed contract rules, most of the current tax expenditure relates to real estate construction, especially housing.

Rationale

The completed contract method of accounting for long-term construction contracts has been permitted by Internal Revenue regulations since 1918, on the grounds that such contracts involved so many uncertainties that profit or loss was undeterminable until the contract was completed.

In regulations first proposed in 1972 and finally adopted in 1976, the Internal Revenue Service extended the method to certain manufacturing contracts (mostly defense contracts), at the same time tightening the rules as to which costs must be capitalized. Perceived abuses, particularly by defense contractors, led the Congress to question the original rationale for the provision and eventually led to a series of ever more restrictive rules. The

Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248) further tightened the rules for cost capitalization.

The Tax Reform Act of 1986 (P.L. 99-514) for the first time codified the rules for long-term contracts and also placed restrictions on the use of the completed contract method. Under this Act, the completed contract method could be used for reporting only 60 percent of the gross income and capitalized costs of a contract, with the other 40 percent reported on the "percentage of completion" method, except that the completed contract method could continue to be used by contractors with average gross receipts of $10 million or less to account for real estate construction contracts of no more than two years' duration. It also required more costs to be capitalized, including interest.

The Omnibus Budget Reconciliation Act of 1987 (P.L. 100-203) reduced the share of a taxpayer's long-term contracts that could be reported on a completed contract basis from 60 percent to 30 percent. The Technical and Miscellaneous Revenue Act of 1988 (P.L. 100-647) further reduced the percentage from 30 to 10, (except for residential construction contracts, which could continue to use the 30 percent rule) and also provided the exception for home construction contracts.

The Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239) repealed the provision allowing 10 percent to be reported by other than the percentage of completion method, thus repealing the completed contract method, except as noted above.

The most recent legislative change was a provision of the American Jobs Creation Act of 2004, later amended in the Gulf Opportunity Zone Act of 2005, permitting naval shipbuilders to use the completed contract method.

Assessment

Use of the completed contract method of accounting for long-term contracts was once the standard for the construction industry. Extension of the method to defense contractors, however, created a perception of widespread abuse of a tax advantage. The Secretary of the Treasury testified before the Senate Finance Committee in 1982 that "virtually all" defense and aerospace contractors used the method to "substantially reduce" the taxes they would otherwise owe.

The principal justification for the method had always been the uncertainty of the outcome of long-term contracts, an argument that lost a lot of its force when applied to contracts in which the Government bore most of the risk. It was also noted that even large construction companies, who used the method for tax reporting, were seldom so uncertain of the outcome of their contracts that they used it for their own books; their financial statements

were almost always presented on a strict accrual accounting basis comparable to other businesses.

Since the use of the completed contract rules is now restricted to a very small segment of the construction industry, it produces only small revenue losses for the Government and probably has little economic impact in most areas. One area where it is still permitted, however, is in the construction of single-family homes, where it adds some tax advantage to an already heavily tax-favored sector.

Selected Bibliography

Knight, Ray A., and Lee G. Knight. Recent Developments Concerning the Completed Contract Method of Accounting, *The Tax Executive*, v. 41, Fall 1988, pp. 73-86.

U.S. Congress, House of Representatives Committee on the Budget. *Omnibus Budget Reconciliation Act of 1989.* September 1989, p. 1347.

— , Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Tax Equity and Fiscal Responsibility Act of 1982.* JCS-38-82, December 31, 1982, pp. 148-154.

— . *General Explanation of the Tax Reform Act of 1986.* JCS-10-87, May 4, 1987, pp. 524-530.

— . *Tax Reform Proposals: Accounting Issues.* JCS-39-85, September 13, 1985, pp. 45-49.

U.S. General Accounting Office, *Congress Should Further Restrict Use of the Completed Contract Method*. Report GAO/GGD-86-34, January 1986.

CASH ACCOUNTING, OTHER THAN AGRICULTURE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.9	[1]	0.9
2009	0.9	[1]	0.9
2010	1.0	[1]	1.0
2011	1.0	[1]	1.0
2012	1.1	[1]	1.1

([1])Less than $50 million.

Authorization

Sections 446 and 448.

Description

For tax purposes, the cash method of accounting allows business taxpayers to report income in the year when it is received and take deductions in the year when expenses are paid. By contrast, the accrual method of accounting makes it possible for business taxpayers to recognize income when it is earned — whether or not it has been received — and to claim deductions for expenses in the year when the expenses are incurred. Each accounting method has its advantages. The cash method is simpler to use, while the accrual method often paints a more accurate picture of a business taxpayer's income, as it matches income with expenses with greater precision and rigor.

Some taxpayers are required to use the accrual method of accounting in computing their taxable income. Specifically, every firm (except some

farmers) that maintains an inventory as part of conducting its business, or that receives certain types of income and incurs expenses that span two or more tax years (*e.g.*, depreciation and prepaid expenses), must use that method. C corporations, partnerships that have C corporations as partners, trusts that earn unrelated business income, and authorized tax shelters also are required to use the accrual method of accounting.

But the cash method may be used by any business taxpayer that is not a tax shelter and falls in at least one of the following categories: (1) the taxpayer is engaged in the business of farming or tree raising (discussed under "Agriculture" above); (2) a qualified personal service corporation; and (3) a firm not required to use the accrual method (including C corporations) that had $5 million or less in average gross receipts in the three previous tax years. Qualified personal service corporations are employee-owned service businesses in the fields of health, law, accounting, engineering, architecture, actuarial science, performing arts, or consulting. In addition, the Internal Revenue Service has ruled in recent years that the cash method may be used by most sole proprietorships, S corporations, and partnerships with average annual gross receipts of $1 million or less in the three previous tax years (IRS Rev. Proc. 2001-10), and by firms involved in providing services or fabricating products according to customer designs or specifications with average annual gross receipts of $10 million or less (IRS Rev. Proc. 2002-28).

Impact

Most individuals and many businesses use the cash method of accounting for tax purposes because it is less burdensome than the accrual method of accounting. The revenue losses from the cash method mainly benefit the owners of eligible smaller businesses and professional service corporations of all sizes.

Rationale

Individuals and many businesses are allowed to use the cash method of accounting because it typically requires keeping fewer records than do other methods of accounting.

Under the Revenue Act of 1916, a taxpayer may compute income for tax purposes using the same accounting method the taxpayer used to compute income for business purposes. The Internal Revenue Code of 1954 modified this rule by permitting taxpayers to use a combination of accounting methods for tax purposes. The Tax Reform Act of 1986 barred tax shelters, C corporations, partnerships that have C corporations as partners, and certain trusts from using the cash method of accounting.

Assessment

The choice of accounting methods may affect the amount and timing of a taxpayer's Federal income tax payments. Under the accrual method, income for a given period is more precisely matched with the expenses associated with producing that income. Therefore, the accrual method more accurately reflects a taxpayer's net income for a given period. For business purposes, the accrual method also provides a better indication of a firm's financial performance for a given period.

Under the cash method of accounting, taxpayers can exercise greater control over the timing of receipts and payments for expenses. By shifting income or deductions from one tax year to another, taxpayers can defer the payment of income taxes or take advantage of lower tax rates.

At the same time, the cash method of accounting entails lower costs of compliance. It is also the method most familiar to the individuals and small firms able to use it for tax purposes.

Selected Bibliography

Guenther, Gary. *Small Business Tax Benefits: Overview and Economic Rationales*. Library of Congress, Congressional Research Service Report RL32254. Washington, DC: March 3, 2008, pp. 11-12.

Tinsey, Frederick C. "Many Accounting Practices Will Have to be Changed as a Result of the Tax Reform Act," *Taxation for Accountants*, v. 38. January 1987, pp. 48-52.

U.S. Congress, Joint Committee on Taxation. *Tax Reform Proposals: Accounting Issues*, Committee Print, 99th Congress, 1st session. September 13, 1985.

— . *Technical Explanation of S.3152, The "Community Renewal and New Markets Act of 2000."* JCX-105-00, October 2000, p. 77.

-. *Technical Explanation of the "Economic Security and Worker Assistance Act of 2002."* JCX-6-02, February 13, 2002, p. 62.

-, *General Explanation of Tax Legislation Enacted in the 107th Congress*. JCS-1-03, January 2003, pp. 240-242.

U.S. Department of the Treasury. *Announcement 2002-45. Revenue Procedure 2002-14.* April 12, 2002.

U.S. Department of the Treasury. Internal Revenue Service. *Accounting Periods and Methods*. Publication 538. 2004.

Weinstein, Gerald P. And William J. Cenker. "Tax Accounting Methods and Entity Choice," *Taxes*, vol. 86, no. 8, August 2008, pp. 23-32.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT SMALL-ISSUE QUALIFIED PRIVATE ACTIVITY BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.3	0.1	0.4
2009	0.3	0.1	0.4
2010	0.3	0.1	0.4
2011	0.4	0.1	0.5
2012	0.4	0.2	0.6

Authorization

Sections 103, 141, 144, and 146.

Description

Interest income on State and local bonds used to finance business loans of $1 million or less for construction of private manufacturing facilities is tax exempt. These small-issue industrial development bonds (IDBs) are classified as private-activity bonds rather than governmental bonds because a substantial portion of their benefits accrues to individuals or business rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

The $1 million loan limit may be raised to $20 million if the aggregate amount of related capital expenditures (including those financed with tax-exempt bond proceeds) made over a six-year period is not expected to exceed $20 million. Aggregate borrowing is limited to $40 million for any

one borrower. The bonds are subject to the State private-activity bond annual volume cap.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to offer loans to manufacturing businesses at reduced interest rates.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and business borrowers, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

The first bonds for economic development were issued without any Federal restrictions. State and local officials expected that reduced interest rates on business loans would increase investment and jobs in their communities. The Revenue and Expenditure Control Act of 1968 imposed several targeting requirements, limiting the tax exempt bond issue to $1 million and the amount of capital spending on the project to $5 million over a six-year period. The Revenue Act of 1978 increased the $5 million limit on capital expenditures to $10 million, and to $20 million for projects in certain economically distressed areas. The American Jobs Creation Act of 2004 (P.L. 108-357) effectively increased the related expenditures limit to $20 million for bonds issued after September 30, 2009. The Tax Increase Prevention and Reconciliation Act of 2005 (P.L. 109-122) moved the eligible date for the bonds up to December 31, 2006.

Several tax acts in the 1970s and early 1980s denied use of the bonds for specific types of business activities. The Deficit Reduction Act of 1984 restricted use of the bonds to manufacturing facilities, and limited any one beneficiary's use to $40 million of outstanding bonds. The annual volume of bonds issued by governmental units within a State first was capped in 1984, and then included by the Tax Reform Act of 1986 under the unified volume cap on private-activity bonds. This cap is equal to the greater of $85 per capita or $262.095 million in 2008. The cap has been adjusted for inflation since 2003.

Small-issue IDBs long had been an "expiring tax provision" with a sunset date. IDBs first were scheduled to sunset on December 31, 1986 by the Tax Equity and Fiscal Responsibility Act of 1982. Additional sunset dates have

been adopted three times when Congress has decided to extend small-issue IDB eligibility for a temporary period. The Omnibus Budget Reconciliation Act of 1993 made IDBs permanent. The American Jobs Creation Act of 2004 increased the total capital expenditure limitation from $10 million to $20 million for small-issue IDBs. Congress, at the time, thought it was appropriate because the $10 million limit had not been changed for many years.

Assessment

It is not clear that the Nation benefits from these bonds. Any increase in investment, jobs, and tax base obtained by communities from their use of these bonds probably is offset by the loss of jobs and tax base elsewhere in the economy. National benefit would have to come from valuing the relocation of jobs and tax base from one location to another, but the use of the bonds is not targeted to a subset of geographic areas that satisfy explicit Federal criteria such as income level or unemployment rate. Any jurisdiction is eligible to utilize the bonds.

As one of many categories of tax-exempt private-activity bonds, small-issue IDBs have increased the financing costs of bonds issued for public capital. With a greater supply of public bonds, the interest rate on bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds also increases the assets available to individuals and corporations to shelter their income from taxation.

Bibliography

Anderson, John E., and Robert W. Wassmer. *Bidding for Business: The Efficacy of Local Economic Development Incentives in a Metropolitan Area*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2000, pp. 1-24.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 2008.

— . *Private Activity Bonds: An Analysis of State Use, 2001-2006*. Library of Congress, Congressional Research Service Report RL34159. April 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

Stutzer, Michael J. "The Statewide Economic Impact of Small-Issue Industrial Development Bonds," *Federal Reserve Bank of Minneapolis Quarterly Review*, v. 9. Spring 1985, pp. 2-13.

Temple, Judy. "Limitations on State and Local Government Borrowing for Private Purposes." *National Tax Journal*, vol 46, March 1993, pp. 41-53.

U.S. Congress, Congressional Budget Office. Statement of Donald B. Marron before the Subcommittee on Select Revenue Measures Committee on Ways and Means U.S. House of Representatives. "Economic Issues in the Use of Tax-Preferred Bond Financing," March 16, 2006.

U.S. Congress, Congressional Budget Office. *The Federal Role in State Industrial Development Programs*, 1984.

— . *Small Issue Industrial Revenue Bonds*, April 1981.

U.S. Congress, Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

— . "Federal Tax Policy, IDBs and the Market for State and Local Bonds," National Tax Association — Tax Institute of America Symposium: Agendas for Dealing with the Deficit, *National Tax Journal*, v. 37. September 1984, pp. 411-420.

TAX CREDIT FOR EMPLOYER-PAID FICA TAXES ON TIPS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	0.3	0.5
2009	0.2	0.3	0.5
2010	0.2	0.3	0.5
2011	0.2	0.3	0.5
2012	0.2	0.4	0.6

Authorization

Section 45B.

Description

Tips received by employees providing, serving, or delivering food and beverages are treated as wages under the Federal Unemployment Tax Act (FUTA) and the Federal Insurance Contributions Act (FICA). This means that employers must pay Social Security and Medicare taxes on those tips, and that employers are required to report any tips received to the Internal Revenue Service (IRS). In the case of tipped employees, the Fair Labor Standards Act (FLSA) allows employers to lower the minimum wage to $2.13 per hour, provided the combination of tips and cash wages equals the applicable federal minimum wage.

Employers of tipped employees may claim a non-refundable tax credit equal to the FICA taxes paid on tips in excess of those treated as cash wages for the purpose of meeting the minimum wage requirements of the FLSA. The credit is available regardless of whether an employee reports tips received. Under the Small Business and Work Opportunity Tax Act of 2007,

the minimum wage for determining the credit was fixed at the minimum wage in effect on January 1, 2007, which was $5.15. As a result, the credit applies to tips received by an employee in excess of $5.15 per hour. No deduction may be claimed for any amount taken into account in computing the credit. The credit is one of the components of the general business credit (GBC) under section 38, but it is exempt from the rule limiting the use of the GBC in a tax year. Unused FICA credits may be carried back one year or carried forward up to 20 years. An employer may elect to not use the credit in any tax year.

In a decision announced on June 17, 2002, the U.S. Supreme Court ruled that the IRS may use an aggregate estimation method to calculate a restaurant's FICA tax liability for unreported tip income. The decision rested on whether tax law authorized the IRS to base the FICA assessment upon an aggregate estimate of all tips paid to a restaurant's employees, or whether the law required the IRS to determine total tip income by estimating each individual employee's tip income separately and summing the individual amounts. The Supreme Court held that the IRS could use an aggregate estimate, provided it was based on a reasonable method.

Impact

Section 45B benefits firms that serve food and beverages by reducing their labor costs. It also boosts tax compliance in the industry by encouraging employers to provide compete and accurate reports of employee tip income to the IRS. Some believe that the law before the enactment of the credit made it possible for employers to reduce their FICA taxes by encouraging or requiring their employees not to report all their tip income. Current tax law imposes no additional burdens on food and beverage employers for complete reporting of tip income. To the extent that all tips are reported and all FICA taxes paid, employees may be eligible for larger payments from the Social Security system when they retire.

Rationale

The credit for employer-paid FICA taxes on tips originated with the Omnibus Budget Reconciliation Act of 1993 (P.L. 101-508). Though it was not included in either the House-passed version of the bill or the amended version passed by the Senate, the credit was inserted in the Conference Committee report without an explanation. Some news reports indicated that it was added at the last minute to mitigate the impact on restaurant industry sales and revenue of another provision that reduced the deductible portion of the cost of business meals from 80 percent to 50 percent.

The Small Business Job Protection Act of 1996 (P.L. 104-188) clarified two aspects of the credit. First, it specified that the credit was available

regardless of whether employees reported the tips on which an employer paid the FICA tax, and that the credit applied to all FICA taxes paid on tips after December 31, 1993, even if some of the tip income was received before that date. The act also stated that tips received by employees delivering food or beverages were eligible for the credit. (Prior law provided the credit only for tips received on the premises of a food or beverage establishment.) According to the legislative history of the credit, Congress intended that the effective date be set at January 1, 1994, but it deemed the Treasury Department's interpretation of that date to be inconsistent with the provision as enacted. The Ways and Means committee report on the bill noted there was no good reason not "to apply the credit to all persons who provide food and beverages, whether for consumption on or off the premises."

As a result of the Small Business and Work Opportunity Act of 2007, employers may calculate their credit for FICA taxes paid on tip income by using a fixed federal minimum wage of $5.15 per hour, instead of the current minimum wage, which stands at $6.55 per hour.

Assessment

Many would agree that tips are income that should be treated for tax purposes the same way as other forms of compensation. Waiters, waitresses, and delivery persons are not self-employed individuals; so their tip income should be considered part of their total compensation. When seen from this perspective, tips can be thought of as a surrogate wage that employers might have to pay in their absence. In addition, many would argue that all employers should share equally the costs of providing future benefits for retirees under the Social Security program.

Because Social Security taxes are determined on the basis of an employee's total compensation (including tip income), current law provides a benefit only to food and beverage employers whose employees receive part of their compensation in the form of tips. Other businesses whose employees receive a portion of their compensation in the form of tips (such as cab drivers, hairdressers, etc.) are barred from using the tax credit. For this reason, it can be said that section 45B violates the principle of horizontal equity. Since all other employers pay Social Security taxes on the entire earnings of their employees, the provision may place some of them at a competitive disadvantage. For example, a carry-out food concern where tipping is not customary pays the full amount of applicable of Social Security taxes, while a sit-down diner does not.

The restaurant industry has some objections to the current design of the credit. First, it maintains that tip income is not a cash wage but a gift to employees from the customers they serve. Second, industry representatives contend that if the tip income is treated as compensation, then employers should be able to count all tip income in determining the minimum wage

(current law allows only a portion of the federal minimum wage to consist of tip income). In addition, the industry argues that the mandatory reporting of tip income forces employers to bear large and unreasonable administrative costs.

Selected Bibliography

Allen, Robin Lee. "FICA Troubles are Back: Operators Arm for Fight" *Nation's Restaurant News*, vol. 28, January 31, 1994, pp. 1, 52.

Bennett, Alison. "IRS to Resume Employer-Only Tip Audits; Agency Expanding Tip Reporting Program," *Daily Tax Report*, Bureau of National Affairs, Inc., No. 82, April 27, 2000, pp. GG-1 — GG-2.

Crowson, Christopher. "Service with a Chagrin: The Problem of Aggregate Estimates of Unreported Tips in the United States v. Fior D'Italia, Inc.," *The Campbell Law Review*, vol. 25, no. 93, Fall 2002, pp. 93-114.

Donovan, Jeremiah S. "Tax-Exempt Organizations and Claiming the Tip Credit," *Tax Adviser*, vol. 30, August 1999, pp. 552-553.

Erickson, Jennifer M. "Fior D'Italia: The "Taxing" Problem of Unreported Tip Income," *Iowa Law Review*, vol. 88, no. 655, March 2003, pp. 655-679.

Fesler, Dan R. and Larry Maples. "Fior D'Italia: Supreme Court Approves Aggregate Method on Tips," *Taxes*, vol. 80, no. 11, November 2002, pp. 53-59.

Hennig, Cherie J., William A. Raabe, and John O. Everett. "Small Business and Work Opportunity Tax Act of 2007: Analysis and Tax Planning Opportunities," *Taxes*, November 2007, pp. 45-47.

McInnes, John T. "Internal Revenue - IRS Aggregate Estimates of Unreported Employee Tip Income to Determine Employer FICA Liability Now Constitutional - United States v. Fior D'Italia, Inc.," *Suffolk Journal of Trail and Appellate Advocacy*, vol. 8, 2003, pp. 179-188.

Myers, Robert J. "Social Security in the Pork Barrel: The Restaurateurs Try To Raid the Treasury," *Tax Notes*, v 59, April 19, 1993. p. 427-428.

Peckron, Harold S. "The Tip Police: Aftermath of the Fior D'Italia Rule," *Catholic University Law Review*, vol. 52, no. 1, Fall 2002, pp. 1-36.

Raby, Burgess J.W. and William L. Raby. "The War on Unreported Cash Tips," *Tax Notes*, vol. 81, November 2, 1998, pp. 605-609.

Robertson, John, Tina Quinn, and Rebecca C. Carr. "Unreported Tip Income: A Taxing Issue; Taxation of Tips," *The CPA Journal*, vol. 76, no. 12.

Rosenthal, Ellin. "IRS, Restaurateurs Clash Over FICA Credit on Tip Income," *Tax Notes*, vol. 63, April 4, 1994. Pp. 16-17.

Sher, David Lupi. "Forces are Mounting Against IRS's Tip Income Policies," *Tax Notes*, vol. 84, August 2, 1999, pp. 675-680.

Suelzer, Ray. "IRS Hopes to Get Employee TIP Reporting on `TRAC'," *Taxes*, vol. 73, August 1995, pp. 463-467.

U.S. Congress, Congressional Budget Office. *Budget Options.* "Replace the Income Tax Credit with a Business Deduction for Employer FICA on Certain Tip Income." Washington, DC: February 2001, p. 436.

U.S. Congress, Joint Committee on Taxation. "Present Law and Background Relating to the Tax Treatment of Tip Income." Washington, DC: July 13, 2004, pp. 1-7.

Wolf, Kelley. "IRS May Collect Employment Taxes on Aggregated Amount of Unreported Tip Income," *Taxes*, vol. 78, June 2000, pp. 35-38.

PRODUCTION ACTIVITY DEDUCTION

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.8	5.5	7.3
2009	2.0	6.0	8.0
2010	2.7	7.3	10.0
2011	3.5	8.6	12.1
2012	3.9	9.4	13.3

Authorization

Section 199.

Description

Qualified production activities income is allowed a deduction from taxable income of 3% in 2005-2006, 6% in 2007-2009, and 9% thereafter. The deduction cannot exceed total taxable income of the firm and is limited to 50% of wages related to the qualified activity.

Production property is property manufactured, produced, grown or extracted within the United States. Eligible property also includes domestic film, energy, and construction, and engineering and architectural services. For the latter, the services must be produced in the United States for construction projects located in the United States. The law specifically excludes the sale of food and beverages prepared at a retail establishment, transmission and distribution of electricity, gas, and water, and receipts from property leased, licensed, or rented to a related party. The benefits are also allowed for Puerto Rico for 2007 through 2010. Oil extraction is permanently limited to a 6% deduction. Several special modifications are

made for films including a broader definition of wages and some other revisions.

There are rules that allow the allocation of the deduction to pass through entities and cooperatives. The provision also allows the revocation without penalty of a prior election to treat timber cutting as the sale of a capital asset. The deduction is also allowed under the alternative minimum tax. The tax expenditure is the tax savings due to the deduction.

Impact

This provision lowers the effective tax rate on the favored property, in most cases when fully phased in, from the top corporate tax rate of 35% to 31.85%. The deduction is available to both corporations and unincorporated businesses, but primarily benefits corporations. For the many proprietorships that have few or no employees, the benefit will be limited or absent because of the wage requirement unless the firm incorporates.

In a letter dated September 22, 2004 to Mark Prater and Patrick Heck, responding to a query about the similar (although slightly different) Senate version of the provision, the Joint Tax Committee indicated that three quarters of the benefit would have gone to corporations, 12 percent would have gone to Subchapter S firms (smaller incorporated firms that elect to be treated as partnerships) and cooperatives, 9 percent would have gone to partnerships, and 4 percent to sole proprietorships. Based on the revenue estimates ($3 billion for 2006) and projected corporate tax receipts of $249 billion for that year, the implication is that around a third of corporate activity qualifies.

The beneficial treatment given to income from these activities will encourage more investment in manufacturing and other production activities and less in sales and services. It will also encourage more equity investment in the affected sectors.

Rationale

This provision was enacted as part of the American Jobs Creation Act of 2004 (P.L. 108-357), a bill that repealed the Extraterritorial Income provision that was found to be an unacceptable export subsidy by the World Trade Organization. The stated purpose was to enhance the ability of firms to compete internationally and to create and preserve manufacturing jobs.

The Tax Increase Prevention Act of 2006 modified the provision by clarifying that wages for purposes of the deduction limit were those relating to domestic production activities. The Tax Relief and Health Care Act (P.L. 109-432) added the benefit for Puerto Rico. H.R. 1424 (October 2008),

which included earlier tax provisions from H.R. 7060 extended the Puerto Rico treatment through 2010, restricted the deduction for oil extraction, and expanded the treatment of films.

A repeal of the provision was included as part of Chairman Rangel's (Ways and Means) tax reform proposal in 2007 (The Tax Reduction and Reform Act of 2007).

Assessment

The provision should somewhat expand the sector qualifying for the benefit and contract other sectors. It will introduce some inefficiency into the economy by diverting investment into this area, although it will also primarily lower the burden on corporate equity investment which is more heavily taxed than other forms of investment and among qualifying firms reduce the incentive for debt finance. This latter effect would product an efficiency gain.

Economists in general do not expect that there is a need to use tax incentives to create jobs in the long run because job creation occurs naturally in the economy. Nor can tax provisions permanently affect the balance of trade, since exchange rates would adjust.

There has been concern about the difficulty in administering a tax provision that provides special benefits for a particular economic activity. Firms will have an incentive to characterize their activities as eligible and to allocate as much profit as possible into the eligible categories. A number of articles written by tax practitioners and letters written to the Treasury indicate that many issues of interpretation have arisen relating to the definition of qualified activity, treatment of related firms, and specific products such as computer software and films and recording. Canada had adopted a similar provision several years ago and repealed it because of the administrative complications.

Selected Bibliography

Deloitte Tax LLP. "Producing Results: An Analysis of the New Production Activities Deduction," *Tax Notes*, February 21, 2005, pp. 961-984.

Dilley, Steven C. and Fred Jacobs, "The Qualified Production Activities Deduction: Some Planning Tools," *Tax Notes*, July 4, 2005, pp. 87-98.

Gravelle, Jane G. *Comparison of Tax Incentives for Domestic Manufacturing in Current Legislative Proposals.* Library of Congress, Congressional Research Service Report RL32103, Washington, DC: October 1, 2004.

Gravelle, Jane G. *The Tax Reduction and Reform Act of 2007: An Overview*, Congressional Research Service Report Rl34249, Washington, DC: June 20, 2008.

Jenks, Carl M. "Domestic Production Deduction: FAQs and a Few Answers," *Tax Notes*, August 28, 2006, pp. 751-757.

McClellan, John, "Five Things an Economist Things are Important in Analyzing the Domestic Production Deduction: What Accountants and Lawyers Should Know About Economists," *National Tax Journal*, vol. 59, September, 2006, pp. 579-584.

Mills, Lillian, "Five things Economists and Lawyers Can Learn From Accountants: An Illustration Using the Domestic Production Activities Deduction, " *National Tax Journal*, vol. 59, September, 2006, pp. 585-598.

Rojas, Warren. "New Manufacturing Deduction Presents Many Open Questions." *Tax Notes*, October 18, 2004, pp. 279-280.

U.S. Congress, House, *Conference Report on the American Jobs Creation Act*, Report 108-77, Washington, DC: U.S. Government Printing Office, 2004.

U.S. Congress, Joint Committee on Taxation, *Technical Explanation of H.R. 7060, The Renewable Energy and Job Creation Act of 2008*, JCX-75-08, September 25, 2008, Posted at:
[http://www.house.gov/jct/x-75-08.pdf].

DEDUCTION OF CERTAIN FILM AND TELEVISION PRODUCTION COSTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.2	0.2
2009	([1])	0.2	0.2
2010	([2])	([2])	([2])
2011	([2])	([2])	([2])
2010	([2])	([2])	([2])

([1]) Less than $50 million.
([2]) Negative tax expenditure of less than $50 million.

Authorization

Section 181.

Description

The cost of producing films and television programs must be depreciated over a period of time using the income forecast method (which allows deductions based on the pattern of expected earnings). This provision allows production costs for qualified film and television shows to be deducted when incurred. Eligible productions are restricted to those with a cost of $15 million or less ($20 million if produced in certain designated low income areas) and in which at least 75 percent of the compensation is for services performed in the United States. The provision expires after 2009. Only the first 44 episodes of a television series qualify, and sexually explicit productions are not eligible.

Impact

Expensing provides a benefit because deductions can be taken earlier. For example, at a seven percent interest rate, the value of taking a deduction currently is 40 percent greater than taking a deduction five years from now $(1+.07)^5$. The benefit is greatest per dollar of investment for those productions whose expected income is spread out over a long period of time and whose production period is lengthy. This provision encourages film and television producers to locate in the United States and counters the growth in so-called "runaway" production.

The original provision had a dollar ceiling that targeted the benefit to smaller productions. The average cost of producing a movie for theatrical release in 2003 (by members of the Motion Picture Association of America) was $63.8 million, so that many of these movie productions would not have qualified. A revision in 2008 that allowed any otherwise eligible film to qualify for the deduction up to the dollar limit meant the benefit was extended to larger productions, although the limit still focuses the provision to smaller ones, compared to a provision with no dollar cap. One study found that made-for-television movies and mini-series, in particular, have experienced relocation abroad, and that most of this business has gone to Canada. Many countries, including Canada, provide subsidies for production.

Rationale

This provision was enacted as part of the American Jobs Creation Act of 2004 (P.L. 108-357) to extend through 2008. The purpose was to discourage the "runaway" production of film and television production to other countries, where tax and other incentives are often offered. The provision adopted at that time was restricted to productions costing $15 million or less ($20 million or less if in certain designated areas); the Emergency Economic Stabilization Act (P.L. 110-343), adopted in October of 2008 allowed the first $15 million ($20 million) of any otherwise qualified production to be expensed and extended the qualifying period through 2009. The tax provisions in this bill were contained in an earlier bill, H.R. 7060.

Assessment

This provision will provide an incentive to remain in the United States, at least for firms that are profitable enough to have tax liability. The magnitude of the benefit depends on the average lag time from production to earning income. If that lag is five years and the discount rate is seven percent, for example, the value of the deduction is increased by 40 percent, and with a 35-percent tax rate, the reduction in cost would be about 14

percent. If the average lag is only a year, the reduction is slightly over two percent.

In general, special subsidies to industries and activities tend to lead to inefficient allocation of resources. Moreover, in the long run, providing subsidies to counter those provided by other countries will not necessarily improve circumstances, unless they induce both parties to reduce or eliminate their subsidies. At the same time, individuals who have specialized in film and television production are harmed when production shifts to other countries, and the disruption can be significant when caused through provision of large subsidies or tax incentives.

Because tax subsidies cannot benefit firms that do not have tax liability, the scope of this provision may be narrower than would be the case with a direct subsidy.

Selected Bibliography

Beer, Steen C. and Maria Miles, "Relief Effort," *Filmmaker Magazine*, Winter 2005, http://www.filmmakermagazine.com/winter2005/line_items/relief_effort.php

Monitor Corporation, *U.S. Runaway Film and Television Production Study Report*, Prepared for the Screen Actors Guild and Directors Guild of America, Cambridge MA, 1999.

Moore, Schuyler M. "Film-Related Provisions of the American Jobs Creation Act," *Tax Notes*, December 20, 2204, pp. 1667-1671.

Motion Picture Association of America. *Worldwide Market Research, U.S. Entertainment Industry: 2003 MPA Market Statistics,* 2004.

U.S. Congress, House, *Conference Report on the American Jobs Creation Act*, Report 108-77, Washington, DC: U.S. Government Printing Office, 2004.

U.S. Department of Commerce. *The Migration of U.S. Film and Television Production: Impact of "Runaways" on Workers and Small Business in the U.S. Film Industry*, January 18,2001.

U.S. Congress, Joint Committee on Taxation, *Technical Explanation of H.R. 7060, The Renewable Energy and Job Creation Act of 2008*, JCX-75-08, September 25, 2008, Posted at:
[http://www.house.gov/jct/x-75-08.pdf].

TAX CREDIT FOR THE COST OF CARRYING TAX-PAID DISTILLED SPIRITS IN WHOLESALE INVENTORIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	([1])	([1])
2009	—	([1])	([1])
2010	—	([1])	([1])
2011	—	([1])	([1])
2012	—	([1])	([1])

([1])Less than $50 million.

Authorization

Section 5011.

Description

This credit applies to domestically bottled distilled spirits purchased directly from the bottler (distilled spirits that are imported in bulk and then bottled domestically also qualify for the credit). The credit is calculated by multiplying the number of cases of bottled distilled spirits by the average tax financing cost per case for the most recent calender year ending before the beginning of the taxable year. A case is 12, 80-proof 750-milliliter bottles. The average tax-financing cost per case is the amount of interest that would accrue at corporate overpayment rates during an assumed 60-day holding period on an assumed tax rate of $25.68 per case.

Impact

The excise tax on distilled spirits is imposed when distilled spirits are removed from the plant where they are produced. In the case of imported distilled spirits that are bottled, the excise tax is imposed when they are removed from a U.S. customs bonded warehouse. For distilled spirits imported in bulk containers for bottling in the United States, the excise tax is imposed in the same way as for domestically produced distilled spirits, when the bottled distilled spirits are removed from the bottling plant.

The current federal excise tax rate on distilled spirits is $13.50 per proof gallon.

Assuming an interest rate in the range of 5 to 6 percent, the tax credit will save wholesalers approximately $0.25 a case or $0.02 per bottle of distilled spirit.

Rationale

The tax credit is intended to help equalize the differential costs associated with wholesaling domestically produced distilled spirits and imported distilled spirits. Under current law, wholesalers are not required to pay the federal excise tax on bottled imported spirits until the spirits are removed from a bonded warehouse and sold to a retailer. The federal tax on domestically produced distilled spirits, however, is passed forward as part of the purchase price when the distiller transfers the product to the wholesaler. It is argued that this raises the cost of domestically distilled spirits to wholesalers relative to the cost of bottled imported spirits. The credit is designed to compensate the wholesaler for the foregone interest that could have been earned on the funds that were used to pay the excise taxes on the domestically produced distilled spirits being held in inventory.

Assessment

Under current law, tax credits are not allowed for the costs of carrying products in inventory on which an excise tax has been levied. Normally, the excise tax that is included in the purchase price of an item is deductible as a cost when the item is sold.

Allowing wholesalers a tax credit for the interest costs (or float) of holding excise tax-paid distilled confers a tax benefit to the wholesalers of distilled spirits that is not available to other businesses that also carry tax-paid products in inventory. For instance, wholesalers of beer and wine also hold excise tax-paid products in their inventories and are engaged in similar income producing activities as wholesalers of distilled spirits, but beer and wine wholesalers are not eligible for this tax credit.

In addition, given the relatively small size of the credit, the credit is unlikely to have much effect on price differentials between domestically produced distilled spirits and imported distilled spirits. The credit is also unlikely to produce much tax savings for small wholesalers. It is likely that most of the tax benefits of this credit will accrue to large volume wholesalers of distilled spirits.

Selected Bibliography

U.S. Congress, Joint Committee on Taxation. *Summary Description of the "Highway Reauthorization and Excise Tax Simplification Act of 2005," Title V of H.R. 3, as Passed by the Senate on May 17, 2005*. JCX-41-05, June 13, 2005, pp. 9-10.

-, Committee of Conference. *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users*. Report 109-203, July 28, 2005, pp. 1132-1133.

EXPENSING OF COSTS TO REMOVE ARCHITECTURAL AND TRANSPORTATION BARRIERS TO THE HANDICAPPED AND ELDERLY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	[1]	0.1
2009	0.1	[1]	0.1
2010	0.1	[1]	0.1
2011	0.1	[1]	0.1
2012	0.1	[1]	0.1

[1] Less than $50 million in positive tax expenditures.

Authorization

Section 190.

Description

Generally, an improvement to a depreciable asset such as a building or motor vehicle is treated for tax purposes as a capital expenditure. This means that the cost of the improvements should be recovered by using the appropriate depreciation method and class life for the asset.

Under section 190, however, a business taxpayer may deduct (or expense) up to $15,000 of the expenses incurred in a single tax year for removing physical barriers to handicapped or elderly (age 65 and older) individuals in qualified facilities or public transportation vehicles that the taxpayer owns or leases. None of the costs associated with constructing a new facility or vehicle, or undertaking a complete renovation of an existing facility to make it more accessible to those individuals, qualifies for the deduction. Qualified

expenses beyond $15,000 must be capitalized; they cannot be carried over. In the case of partnerships, the $15,000 limit applies separately to a partnership and its individual partners.

A qualified facility is broadly defined to include any or all portions of a building, structure, equipment, road, walkway, parking lot, or similar real or personal property. A vehicle qualifies for the $15,000 expensing allowance if it offers transportation services to the public; it may be a bus, train, or other mode of public transportation. For example, the modification of a vehicle used to transport a business taxpayer's customers to make it more accessible to or usable by the elderly and handicapped could qualify for the expensing allowance.

Barrier removal projects have to meet design standards approved by the Architectural and Transportation Barriers Compliance Board to qualify for the expensing allowance. These standards apply to projects involving buses, rail cars, grading, walkways, parking lots, ramps, entrances, doors and doorways, stairs, floors, toilet facilities, water fountains, public telephones, elevators, light switches and similar electrical controls, the identification of rooms and offices, warning signals, and the removal of hanging lights, signs, and similar fixtures.

Besides the expensing allowance, eligible small firms may claim a non-refundable tax credit under section 44 for expenses they incur to make their operations more accessible to disabled individuals. The credit is equal to 50 percent of eligible expenditures in a tax year from $250 to $10,250; so the maximum annual credit an eligible business taxpayer could claim is $5,000. It applies to a wider range of expenses than the expensing allowance, as "all amounts paid for the cost of enabling [the taxpayer] to comply with applicable requirements" under the Americans With Disabilities Act of 1990 (ADA) can be used to compute the credit. A firm claiming the credit may also use the expensing allowance, but the expenses eligible for the allowance must be reduced by the amount of the credit. Only firms that employed no more than 30 full-time workers or had gross receipts of $1 million or less in the preceding tax year may claim the credit.

Impact

The provision gives firms an incentive to modify their facilities and transport vehicles to make them more accessible to the elderly and handicapped by lowering the cost of capital for such an investment. It has this effect because the provision, like all accelerated depreciation allowances, defers a small portion of the tax on any income earned by firms making the requisite improvements. In effect, the provision increases the present value of the depreciation allowances a firm may claim for making the required investment.

The tax expenditure associated with the provision lies in the difference between the depreciation deductions firms would take with and without it.

Rationale

The expensing allowance under section 190 originated with the Tax Reform Act of 1976 (P.L. 94-455). The act set the maximum allowance at $25,000 for a single tax year and specified that it would expire at the end of 1979.

P.L. 96-167 extended the allowance through 1982, without modifying it.

Congress allowed the allowance to expire, but through the Deficit Reduction Act of 1984 (P.L. 98-369), it reinstated the allowance from January 1, 1984 through December 31, 1985 and raised the maximum deduction to $35,000.

The Tax Reform Act of 986 (P.L. 99-514) permanently extended the allowance for tax years after 1985.

And under the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508), the maximum allowance was lowered to its present amount of $15,000.

Assessment

There is little doubt that by establishing the expensing allowance under section 190, Congress was using the tax code to promote certain social and economic goals. In this case, a likely goal was to engage the private sector in expanding employment opportunities and improving access to goods and services among the elderly and disabled. Supporters of the provision have long contended that without it, most firms would be unlikely to remove barriers in their facilities and transport systems to the elderly and disabled.

This rationale for the provision raises some questions about its efficacy and desirability. In considering whether to retain or modify the expensing allowance, lawmakers may wish to know the extent to which firms have responded to it by increasing their spending on the removal of physical barriers in their facilities and transport vehicles to the elderly and the handicapped. They may wish to know whether any increases in this spending have influenced trends in employment and access to goods and services among the elderly and handicapped since the provision was enacted 32 years ago. There may also be some interest in comparing the cost-effectiveness of the expensing allowance and other approaches to achieving the goals that led to its creation, such as a government mandate that all firms remove barriers to the elderly and disabled in their operations backed by

strict enforcement, or a tax credit for the same expenses that are eligible for the allowance. And lawmakers may want to investigate how these approaches to increasing business investment in improving accommodations for the disabled might affect federal spending programs to support them.

Unfortunately, the data needed to address these issues appear to be unavailable. It is not even clear from the business tax data published by the Internal Revenue Service to what extent firms have taken advantage of the expensing allowance. No studies of the efficacy of the allowance or small business tax credit under section 44 appear to have been done. What is known is that the employment of working-age disabled people fell during the 1990s, in spite of the passage of the ADA.

Because the allowance covers only a fraction of the expenses a firm incurs in accommodating the needs of disabled employees, it can be argued that its incentive effect is too meager to have much of an impact on employment levels for the disabled. Further investigation of the link between financial incentives like the allowance or section 44 tax credit and hiring rates for the disabled may yield useful findings for lawmakers.

Selected Bibliography

Bollman, Andy and E.H. Pechan & Associates. *Evaluation of Barrier Removal Costs Associated with 2004 American with Disabilities Act Accessibility Guidelines*. Small Business Administration, Office of Advocacy, Washington, DC: November 2007.

Bruyere, Susanne M., William A. Erickson, and Sara A. VanLooy. "The Impact of Business Size on Employer ADA Response." *Rehabilitation Counseling Bulletin*, vol. 49, no. 4, Summer 2006, pp. 194-207.

McLaughlin, Thomas D. "The American With Disabilities Act." *The Tax Adviser*, vol. 23, no. 9, September 1992, pp. 598-202.

National Council on Disability. *The Impact of the American with Disabilities Act: Assessing the Progress Toward Achieving the Goals of the ADA*. Washington, DC: July 26, 2007.

Schaffer, Daniel C. "Tax Incentives." *The Milbank Quarterly*, vol. 69, 1991, pp. 293-312.

Stapleton, David C., Richard V. Burkhauser, and Andrew J. Houtenville. *Has the Employment Rate of People with Disabilities Declined? Policy Brief*. Cornell University, Employment and Disability Institute, December 2004.

REDUCED TAX RATE ON SMALL BUSINESS STOCK GAINS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.5	—	0.5
2009	0.5	—	0.5
2010	0.5	—	0.5
2011	0.5	—	0.5
2012	0.4	—	0.4

Authorization

Section 1202.

Description

Under current federal tax law, gains on the sale of capital assets held longer than one year are taxed at individual rates that are lower than the individual tax rates for ordinary income. Beginning in 2008, individual taxpayers in the 10-percent and 15-percent tax brackets pay no tax on long-term capital gains; taxpayers in higher tax brackets are subject to a long-term capital gains tax rate of 15 percent.

Nonetheless, non-corporate taxpayers (including passthrough entities like partnerships and subchapter S corporations) may exclude from gross income as much as 50 percent of any gain from the sale or exchange of qualified small business stock (QSBS). The gain on a QSBS issued by a single firm that may be excluded in a tax year is limited to the greater of $10 million, less any cumulative gain excluded by the taxpayer in previous tax years, or ten times a taxpayer's adjusted basis in the stock.

When the exclusion was enacted in 1993, the maximum long-term capital gains tax rate for individuals was 28 percent. Although this rate has been reduced several times since then, the portion of the gain on QSBS subject to taxation is still taxed at a rate of 28 percent. Consequently, the effective tax rate for gains on the sale of QSBS is 14 percent, compared to a maximum effective tax rate of 15 percent on long-term gains for other capital assets.

A stock must satisfy certain requirements to be treated as a QSBS. First, it must be issued by a C corporation with no more than $50 million in gross assets before and at the time the stock is issued. Second, the issuing corporation must employ at least 80 percent of those assets in a qualified trade or business during "substantially all" of the required holding period for the partial exclusion; a qualified trade or business includes specialized small business investment companies licensed under the Small Business Investment Act of 1958 but excludes health care, law, engineering, architecture, food service, lodging, farming, insurance, finance, or mining. Third, the stock must be issued after August 10, 1993. Fourth, it must be acquired by a non-corporate taxpayer at its original issue in exchange for money or property or as compensation for services performed for the issuing firm. This means that purchases of stock issued by eligible firms through an initial public offering could qualify for the partial exclusion. Finally, the buyer must hold the stock more than five years, which is to say that the earliest date anyone was able to take advantage of the exclusion was August 12, 1998.

Under section 1045, eligible taxpayers have the option of rolling over any capital gain from the sale or exchange of QSBS they have held for more than six months. To take advantage of this option, they must purchase other QSBS within 60 days of the transaction. A capital gain is recognized only to the extent that the amount from the sale exceeds the cost of the replacement stock. Any capital gain from the sale that is not recognized lowers the taxpayer's basis in the replacement QSBS.

More generous treatment is available for QSBS issued by corporations located in so-called empowerment zones (EZs). In this instance, non-corporate taxpayers may exclude 60 percent of any gain from the sale or exchange of the stock, provided certain conditions are met. Specifically, the seller must acquire the stock after December 21, 2000 and hold it for more than five years. In addition, the corporation issuing the stock must not only meet the regular requirements for the partial exclusion, but it must derive at least 50 percent of its gross income from business activities conducted within the EZ, and at least 35 percent of its employees must reside in the EZ. No enhanced exclusion is available for the sale or exchange of EZ-related QSBS after December 31, 2014.

The partial exclusion is considered a preference item for the purpose of computing the alternative minimum tax (AMT). Under section 57(a)(7), 7 percent of the excluded gain is added to AMT taxable income for sales and

exchanges of QSBS taking place between May 7, 2003 and December 31, 2010. (The share is scheduled to rise to 42 percent in 2011.) For an individual who pays the AMT in a tax year when he or she claims the partial exclusion, such an adjustment raises the effective capital gains tax rate from 14 percent under the regular income tax to nearly 15 percent under the AMT.

Impact

The partial exclusion for gains on the sale or exchange of QSBS seems intended to increase the flow of equity capital to small start-up firms that are having difficulty raising funds from traditional sources such as banks or venture capital firms. It does this by raising the potential after-tax returns a qualified investor could earn by buying and selling QSBS, relative to similar investments.

The tax expenditure from the partial exclusion arises from the small difference between the effective capital gains tax rate that applies to sales or exchanges of QSBS and the maximum effective capital gains tax rates on the sale or exchange of other capital assets under both the regular income tax and the AMT.

Most of the benefits from the partial exclusion are likely to be captured by small business owners and high-income individuals with relatively high tolerances for risk.

Rationale

The partial exclusion for capital gains on the sale or exchange of QSBS originated with the Omnibus Budget Reconciliation Act of 1993 (OBRA93, P.L. 103-66). While the conference report for the act did not say as much, the design of the exclusion left little doubt that it was targeted at small research-intensive manufacturing firms. Under OBRA93, half of the excluded gain was treated as an AMT preference item.

Under the Taxpayer Relief Act of 1997 (TRA, P.L. 105-34), individuals holding QSBS for more than six months gained the option of deferring the recognition of any gain from the sale or exchange of the stock by reinvesting (or rolling over) the proceeds in another QSBS within 60 days of the transaction. The act also reduced the portion of the excluded gain treated as an AMT preference item from 50 percent to 42 percent for sales or exchanges between May 7, 1997 and January 1, 2001.

The IRS Restructuring and Reform Act of 1998 (P.L. 105-206) extended the rollover option to non-corporate taxpayers besides individuals, such as partnerships and S corporations. It also reduced the portion of the excluded

gain regarded as an AMT preference item from 42 percent to 28 percent for sales or exchanges of QSBS occurring after December 31, 2000.

Under the Community Renewal Tax Relief Act of 2000 (P.L. 106-554), 60 percent of the gain from the sale or exchange of QSBS issued by corporations with a substantial economic presence in EZs could be excluded from gross income.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 reduced the share of the excluded gain considered an AMT preference item to 7 percent for sales or exchanges of QSBS after May 6, 2003. As this change was subject to a sunset provision included in the act, it does not apply to sales or exchanges of this stock occurring after December 31, 2010. Beginning in 2011, 42 percent of the amount excluded from capital gains taxation will be considered an AMT preference item.

Assessment

It appears that the provision is intended to facilitate the formation and growth of small firms involved in developing new manufacturing technologies and organized as C corporations by increasing their access to equity capital. It seeks to do this by giving investors (individuals as well as non-corporate business entities such as venture capital funds organized as partnerships) a robust incentive to acquire a sizable equity stake in such firms. When the partial exclusion was enacted in 1993, this incentive amounted to a significant reduction in the tax burden on the returns to investment in QSBS, relative to the tax burden on the returns to similar investments. Since then, the incentive has diminished in value as the maximum long-term capital gains tax rate has been lowered and the reach of the AMT has expanded.

The design and purpose of the provision raise several important policy issues. Two of them concern the rationale for the partial exclusion and its efficacy. More specifically, lawmakers weighing the arguments for and against legislative proposals to enhance the exclusion may wish to know whether such a tax subsidy is justified on economic grounds. They may also wish to know to what extent it has had its intended effect.

Proponents of the provision say it is needed to address the funding gaps that hamper the formation and growth of many small start-up firms. In their view, these gaps result from the failure of financial markets to provide adequate financing for all equally promising business ventures. Few doubt that established firms of all sizes are more likely to have success in raising the debt or equity capital required to finance a new venture than a small start-up firm intent on entering the same line of business. According to proponents, such a disparity stems from what are known as information asymmetries. The asymmetries arise when entrepreneurs or small business

owners possess more information about the nature of and prospects for a new business venture than lenders or investors. In theory, such a difference can produce conflicts of interest involving moral hazard and adverse selection that can affect the amount and price of equity and debt capital provided to small start-up firms. Proponents argue that small start-up firms involved in developing novel technologies are especially vulnerable to these capital market imperfections. Their growth potential is often difficult to evaluate because it is based on scientific knowledge and intangible assets; they typically lack tangible assets that might serve as collateral in the early stages of their growth; and their products are untested in markets and often exhibit relatively rapid rates of obsolescence. So proponents see the partial exclusion as a constructive means of addressing the imperfections that keep capital markets from providing adequate funding to small start-up firms.

Critics of the provision and other government subsidies for investment in small firms contend that this economic justification for the partial exclusion lacks validity. In their view, there is no reason to think that too few small start-up firms are established over time, or that too many small start-up firms fail to grow into thriving, growing enterprises, or that imperfections in financial markets prevent small start-up firms from gaining access to the financing they need to survive, innovate, and grow. As a result, say critics, a policy initiative like the partial exclusion is bound to entail significant efficiency costs. Of particular concern to them is the exclusion's impact on the domestic allocation of equity capital. Critics claim that the partial exclusion is likely to steer this capital toward eligible firms and away from its most productive uses.

Is there any evidence that the provision has had its intended effect of increasing the flow of equity capital to eligible firms? Unfortunately, a definitive answer to that question cannot be given on the basis of existing information about the partial exclusion. Though more than 10 years have passed since holders of QSBS were first able to take advantage of the exclusion (August 12, 1998), no study has been done that assesses its impact on the capital structure or investment behavior of eligible firms. Still, there is reason to believe that the partial exclusion has not met the initial hopes about its efficacy. Reductions in the maximum long-term capital gains tax rate since 1993 have narrowed the difference in the effective rates that apply to QSBS and other corporate stock to a single percentage point in 2008. In the minds of investors, such a small difference can be overshadowed by the longer required holding period for QSBS and the greater risks associated with buying stock issued by relatively new and untested firms. In addition, the reach of the AMT has increased since the exclusion was enacted in 1993. Individuals paying the AMT are required to add a portion of any partial exclusion they claim to their AMT taxable income as a preference item, increasing the effective tax rate for capital gains on QSBS.

Selected Bibliography

Abromowicz, Kenneth F. and Steven R. Martucci. "Fifty-Percent Exclusion of Gain from Small Business Stock — Incentive or Mine Field?" *CPA Journal*, October 1994, pp. 48-56.

Brierly, Peter. "The Financing of Technology-Based Small Firms: A Review of the Literature." *Quarterly Bulletin*, Bank of England, Spring 2001, pp. 64-83.

Cohen, Ann Burstein. "Is the Qualified Small Business Stock Exclusion Worthwhile?" *Tax Adviser*, December 1998, pp. 856-862.

Cole, Rebel A. *What Do We Know about the Capital Structure of Privately held Firms? Evidence from the Surveys of Small Business Finances*. Small Business Administration, Office of Advocacy. Washington, DC: May 2008.

DeLap, Richard L. and Michael G. Brandt. "RRA '93 Cut in Capital Gains Tax Encourages Investment in Small Business." *Journal of Taxation*, May 1994, pp. 266-271.

Garrison, Larry R. "Tax Incentives for Businesses in Distressed Communities: Businesses in Designated Distressed Areas Are Entitled to Various Tax Incentives." *Tax Adviser*, vol. 38, no. 5, May 1, 2007, pp. 276-283.

Gravelle, Jane G. *Capital Gains Taxes: An Overview*. Library of Congress, Congressional Research Service. Report 96-769, Washington, DC: January 24, 2007.

Guenther, David A. and Michael Willenborg. "Capital Gains Tax Rates and the Cost of Capital for Small Business: Evidence from the IPO Market." *Journal of Financial Economics*, vol. 53, no. 3, September 1999, pp. 385-408.

Guenther, Gary L. *Small Business Tax Benefits: Overview and Economic Rationales*. Library of Congress, Congressional Research Service. Report RL32254, Washington, DC: March 3, 2008.

Holtz-Eakin, Douglas. "Should Small Businesses be Tax-Favored?" *National Tax Journal*, vol. 48, no. 3, September 1995, pp. 387-395.

Levy, Melanie Warfield. "Exclusion of Capital Gain on Sale of QSB Stock." *Business Entities*, vol. 7, no. 4, July/August 2005, pp. 18-35.

Ou, Charles and George W. Haynes. *Uses of Equity Capital by Small Firms — Findings from the Surveys of Small Business Finances (for 1993 and 1998)*. Small Business Administration, Office of Advocacy. Washington, DC: May 2003.

Poterba, James M. "Capital Gains Tax Policy Toward Entrepreneurship." *National Tax Journal*, vol. 42, no. 3, September 1989, pp. 375-389.

Shane, Scott. *The Importance of Angel Investing in Financing the Growth of Entrepreneurial Ventures*. Small Business Administration, Office of Advocacy. Washington, DC: September 2008.

Sullivan, Martin A. "Angels, the No Man's land, and Taxing Entrepreneurship." *Tax Notes*, July 30, 2001, pp. 593-597.

Weinberg, John A. "Firm Size, Finance, and Investment." *Economic Quarterly*, Federal Reserve Bank of Richmond, vol. 80, no. 1, Winter 1994, pp. 19-40.

Wood, Robert W. "Number Crunching and Qualified Small-Business Stock Gains." *Tax Notes*, April 23, 2007, pp. 343-348.

DISTRIBUTIONS IN REDEMPTION OF STOCK TO PAY ESTATE TAXES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.3	-	0.3
2009	0.3	-	0.3
2010	0.3	-	0.3
2011	([1])	-	([1])
2012	0.5	-	0.5

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 303.

Description

When a shareholder in a closely held business dies, a partial redemption of stock (selling stock back to the corporation) is treated as a sale or exchange of an asset eligible for long-term capital gain treatment. With step-up in basis there will be no gain or loss on the redemption — this essentially means that no federal income tax will be due on the redemption. At least 35 percent of the decedent's estate must consist of the stock of the corporation. The benefits of this provision are limited in amount to estate taxes and expenses (funeral and administrative) incurred by the estate.

Impact

Most of the benefits of this provision accrue to estates with small business interests that are subject to estate and inheritance taxes. For 2009, the estate tax exemption will be $3.5 million. The estate tax will be repealed in 2010 and then revert back to the pre-2001exemption of $1 million. Evidence suggests that only about 3.5 percent of businesses are subject to estate taxes.

Rationale

This provision was added to the tax code by the Revenue Act of 1950. The primary motivation behind it was congressional concern that estate taxes would force some estates to liquidate their holdings in a family business. There was further concern that outsiders could join the business, and the proceeds from any stock sales used to pay taxes would be taxable income under the income tax.

Assessment

The idea of the provision is to keep a family business in the family after the death of a shareholder. There are no special provisions in the tax code, however, for favorable tax treatment of other needy redemptions, such as to pay for medical expenses. To take advantage of this provision the decedent's estate does not need to show that the estate lacks sufficient liquid assets to pay taxes and expenses. Furthermore, the proceeds of the redemption do not have to be used to pay taxes or expenses.

Selected Bibliography

Abrams, Howard E. and Richard L. Doernberg. *Federal Corporate Taxation, 6th Edition*. New York: Foundation Press, 2008.

ORDINARY GAIN OR LOSS TREATMENT FOR SALE OR EXCHANGE OF AND FREDDIE MAC PREFERRED STOCK BY CERTAIN FINANCIAL INSTITUTIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.0	([1])	([1])
2009	0.1	2.6	2.7
2010	([1])	0.4	0.4
2011	([1])	0.2	0.2
2012	([1])	0.1	0.1

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 301 of P.L. 110-343.

Description

Capital gains or losses from the sale or exchange of preferred stock of Fannie Mae and Freddie Mac will be treated as ordinary income or loss by applicable financial institutions, which includes banks, mutual savings banks, cooperative banks, and savings and loan associations, among others. For sales or exchanges between January 1, 2008 and September 6, 2008, the taxpayer must have been an applicable financial institution at the time of the sale. For sales after September 6, 2008, the taxpayer had to be an applicable financial institution at all times between September 6, 2008 and the time of the sale or exchange, and the preferred stock had to be held by the institution on September 6, 2008.

Impact

This provision benefits financial institutions that held preferred stock in Fannie Mae or Freddie Mac at the time of or in the months leading up to the federal takeover of these two government sponsored enterprises. Rather than allowing the losses to only offset capital gains, applicable financial institutions can directly reduce taxable income with the losses.

Rationale

This provision was added by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343). Prior to this Act, the gains or losses from the sale or exchange of the preferred stock of Fannie Mae and Freddie Mac were considered capital gains or losses. In the case of a corporation, the capital losses are allowed only to the extent of capital gains, although the losses may be carried back three years or carried forward for five years. At a time financial institutions are in precarious financial condition, this provision allows these financial institutions to use the losses incurred in the government takeover of Fannie Mae and Freddie Mac to reduce their tax liability this year (a year with few capital gains), rather than carry the losses to past tax years or forward to future tax years.

Assessment

After the government takeover of Fannie Mae and Freddie Mac, dividends on the preferred stock of these institutions were suspended and the preferred stock was made junior to the senior preferred stock issued to the Treasury. Consequently, the market value of the preferred stock has plummeted. Banks are required to write down the value of their preferred stock holdings, which will compound capitalization concerns for some financial institutions particularly smaller community and regional banks. The basic idea behind this tax relief is it will reduce the need of the bank "to obtain additional capital from the FDIC or investors. This should also prevent some community banks from becoming insolvent."[20]

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[20]U.S. Senate, Committee on Finance, "Tax Provisions in Financial Rescue Plan Protect Homeowners and Community Banks," News Release, September 28, 2008.

Selected Bibliography

U.S. Congress, Joint Committee on Taxation. *Technical Explanation of Title III (Tax Provisions) of Division A of H.R. 1424, the "Emergency Economic Stabilization Act of 2008"*, (JCX-79-08), October 1, 2008.

INVENTORY ACCOUNTING: LIFO, LCM, AND SPECIFIC IDENTIFICATION

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.1	5.7	6.8
2009	0.6	4.0	4.6
2010	0.6	4.3	4.9
2011	0.7	4.5	5.2
2012	0.7	4.8	5.5

Authorization

Sections 475, 491-492.

Description

A taxpayer that sells goods must generally maintain inventory records to determine the cost of goods sold. Individuals can account for inventory on an item by item basis, but may also use conventions, which include FIFO (first-in, first-out, assuming the most recent good sold is the earliest one purchased) and LIFO (last-in, first-out, assuming the most recent good sold is the last one purchased). LIFO can only be used if it is also used for financial reporting, although it is not available to securities dealers. In connection with FIFO, a taxpayer may choose the LCM method, or lower of cost or market. This method allows the taxpayer a tax deduction for losses on goods that have fallen in value below cost, while in inventory.

The provisions included in the tax expenditure are the allowance of LIFO, which accounts for over 80% of the revenue cost for 2008-2012, the LCM

method which accounts for the remainder, and the specific identification method for homogeneous commodities, which has a negligible effect.

The tax expenditure is based on the notion that basic FIFO is the appropriate method of accounting for costs (unless heterogenous goods are specifically identified). This view is consistent with the expectation that firms would sell their oldest items first. It is also based on the notion that costs should be allowed only when goods are sold. LIFO allows the appreciation in value to be excluded from income when prices are rising. LCM allows recognition of losses when inventory declines in value (but there is no recognition of gain for rise in value). Allowing specific identification permits firms to select higher cost items and minimize taxable income.

Impact

These three methods of inventory accounting allow taxpayers to reduce the tax burden on the difference between the sales price and cost of inventories. Thus, it encourages taxpayers to carry more inventories than would otherwise be the case, although the magnitude of this effect is unclear. Use of LIFO for accounting purposes also results in a valuation of the existing stock of inventory that is smaller than market value, while use of FIFO leads to a valuation more consistent with market value.

According to Plesko (2006) the use of LIFO increased in the 1970s (a period of high inflation) and peaked in the early 1980s when 70% of large firms used LIFO for some part of their inventory. That figure declined to 40% by 2004. LIFO was most heavily used by the chemicals, furniture, general merchandisers, and metal industries. Most firms are small, however, and most firms use FIFO. Neubig and Dauchy (2007) found that over 90% of the increased corporate sector tax from the repeal of LIFO and LCM would come from manufacturing and over half would fall on petroleum and coal products. (These projections depend, however, on forecasts of prices).

LIFO allows tax-planning opportunities to firms that do not exist with FIFO. For example, for firms expecting a high tax liability, purchasing inventory at year end under LIFO can increase costs and reduce taxable income, while firms expecting losses can reduce taxable income by shrinking inventory.

Rationale

The Treasury Department regulations as early as 1918 allowed FIFO and LCM, which were used in financial accounts. LCM was considered a conservative accounting practice which reflected the loss in value of inventories. LIFO, however, was not allowed. The Revenue Act of 1938

allowed LIFO for a small number of narrowly defined industries, and the scope was liberalized by the Revenue Act of 1939. The reason for adopting it was to allow a standard accounting practice. A financial conformity requirement was imposed. Since this period was not one with rising prices, the effects on revenue were minimal. Treasury regulations restricted the application to industries where commodities could be measured in specific units (e.g. barrels), and thus use was limited. In 1942 a dollar value method that could be applied to pools of inventory was introduced for limited cases, and a court case (Hutzler Brothers, 8th Tax Court 14) in 1947 and 1949 Treasury regulations (T.D. 5756, 1949-2 C.B. 21) extended it to all taxpayers.

The Economic Recovery Tax Act of 1981 simplified LIFO by allowing a simplified dollar value method that could be applied to all inventory by small businesses and allowed the use of external indexes. The reason was to make the method that most effectively mitigates the effects of inflation more accessible to all businesses.

The Senate Finance Committee proposed to eliminate the LCM method in 2004 and the Clinton administration proposed the elimination of LCM and the subnormal goods methods (which allows a write down of defective goods) in a number of budgets. Repeal of both LIFO and LCM were included in Chairman Rangel's tax reform proposal, H.R. 3970, 110th Congress.

Assessment

The principal argument currently made for LIFO is that it more closely conforms to true economic income by deferring, and for firms that operate indefinitely, effectively excluding, income that arises from inflation. There are two criticisms of this argument. The first is that the method also allows the deferral and exclusion of real gains. For example, when oil prices increased during the first half of 2008, firms using LIFO who had gains from oil in inventory would not recognize these gains. The second is that other parts of the tax code are not indexed. In particular, firms are allowed to deduct the inflation portion of the interest rate. As a result, debt financed investments in LIFO inventory are subject to a negative tax. Another criticism of LIFO is that it facilitates tax planning to minimize tax liability over time.

It is more difficult to find an argument for using LCM for tax purposes (although it may be desirable for financial purposes). For small firms, using the same inventory system for financial purposes as for tax purposes may simplify tax compliance.

The International Financial Accounting Standards (IFRS) that is used by most other countries and is being considered for adoption in the United

States does not permit LIFO accounting, so that if this system is adopted, and no other changes are made, LIFO would not be available because of the financial conformity requirement. The LIFO issue may, however, present a barrier to adoption.

There is little discussion about the specific identification for homogeneous products, but the revenue associated with that effect is very small.

Selected Bibliography

Abell, Chester. "International Financial Reporting Standards: Tax Must be Involved," *Tax Notes,* September 15, 2008, pp.1057-1058.

Frankel, Micah and Robert Trezevant, "The Year-End LIFO Inventory Purchasing Decision: An Empirical Test," *The Accounting Review*, Vol. 69, April 1994, pp. 382-398.

Johnson, W. Bruce, and Dan S. Dhaliwal, "LIFO Abandonment," *Journal of Accounting Research*, Vol. 26, Autumn 1988, pp,. 236-272.

Kleinbard, Edward D., George A. Plesko, and Corey M. Goodman, "Is it Time to Liquidate LIFO?" *Tax Notes,* October 16, 2006, pp. 237-253.

Neubig, Tom and Estelle Dauchy, "Rangel's Business Tax reforms: Industry Effects by Sector," *Tax Notes,* November 26, 2007, pp.873-878.

Plesko, George, Testimony before the Committee on Finance, United States Senate, June 13, 2006.

U.S. Congress, Joint Committee on Taxation. *Description of Revenue Provisions Contained in the President's Fiscal Year 2001 Budget Proposal, JCS-2-00*, Washington, DC, March 6, 2000.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Economic Recovery Tax Act of 1981, JCS-71-8*, Washington, DC, December 29, 1981.

U.S. Congress, Senate, Hearings before the Committee on Finance, Revenue Act of 1938, Washington, D.C.: U.S. Government Printing Office, 1938.

EXCLUSION OF GAIN OR LOSS ON SALES OF CERTAIN ENVIRONMENTALLY CONTAMINATED AREAS ("BROWNFIELDS") FROM THE UNRELATED BUSINESS INCOME TAX

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	([1])	([1])
2009	-	([1])	([1])
2010	-	([1])	([1])
2011	-	([1])	([1])
2012	-	([1])	([1])

Authorization

Sections 512, 514.

Description

Tax exempt organizations are subject to tax under the unrelated business income tax (UBIT) for activities that are not part of their tax exempt purpose. Gains on the sale of property are not generally taxed unless the property is inventory or stock in trade. Gains from the sale of assets that were debt-financed in part are, however, subject to the UBIT in proportion to the debt. Qualifying brownfield property that is acquired from an unrelated party, subject to remediation, and sold to another unrelated party is exempt from this tax. This provision applies to sales before January 1, 2010.

A qualified contaminated site, or "brownfield," is generally defined as any property that 1) is held for use in a trade or business, and 2) on which there has been an actual or threatened release or disposal of certain hazardous substances as certified by the appropriate State environmental agency. Superfund sites — sites that are on the national priorities list under the

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 — do not qualify as brownfields.

Impact

The exclusion from the tax reduces the cost of remediating and reselling brownfields by tax exempt organizations using debt finance. Most tax exempt organizations are taxed as corporations and thus the saving would typically be 35% of the gain in value (at least for large organizations). When the gain in value is large relative to the acquisition cost, the cost is reduced by close to 35% due to the tax exemption. Thus, this provision substantially reduces the cost of remediating environmentally damaged property.

The provision targets areas in distressed urban and rural communities that can attract the capital and enterprises needed to rebuild and redevelop polluted sites. According to the Environmental Protection Agency, there are thousands of such sites (30,000 by some estimates) in the United States.

Rationale

This provision was added by the American Jobs Creation Act of 2004 (P.L. 108-357). In 2003, when Senator Baucus, ranking member of the Senate Finance Committee introduced this provision as a separate bill, he indicated that the UBIT had unintentionally interfered with the use of tax exempt entity's ability to invest and redevelop environmentally contaminated real estate because of the possibility of becoming subject to the UBIT.

Assessment

The purpose of the UBIT is to prevent tax exempt entities from competing unfairly with taxable firms. Since taxable firms are allowed expensing of their investments in brownfields remediation (see entry on Expensing of Redevelopment Costs in Certain Environmentally Contaminated Areas ("Brownfields")) , their effective tax rate is lowered substantially, particularly in the case where the remediation costs are large relative to the cost of the acquisition of the property. Thus, to some extent, restoring tax exemption may lead to a more level playing field.

As noted in the entry on expensing of remediation costs, the effectiveness of that tax subsidy has been questioned, as many view the main disincentive to development of brownfield sites not the costs but rather the potential liability under current environmental regulation. That is to say the main barrier to development appears to be regulatory rather than financial. And as noted in that entry, barring such regulatory disincentives, the market system ordinarily creates its own incentives to develop depressed areas, as

part of the normal economic cycle of growth, decay, and redevelopment. As an environmental policy, this type of capital subsidy is also questionable on efficiency grounds. Many economists believe that expensing is a costly and inefficient way to achieve environmental goals, and that the external costs resulting from environmental pollution are more efficiently addressed by either pollution or waste taxes or tradeable permits.

Selected Bibliography

Carroll, Deborah A., and Robert J. Eger III. "Brownfields, Crime, and Tax Increment Financing." *American Review of Public Administration*. December 1, 2006. v. 36. pp. 455-477.

Environmental Law Advocates, New Legislative Agency Initiatives to Promote Brownfield Redevelopment, December, 2003: {http://www.goodwinprocter.com/~/media/862C84719E04481B837EE7110762B3E3.ashx].

Greenberg, Michael R., and Justin Hollander. "The Environmental Protection Agency's Brownfields Pilot Program." *American Journal of Public Health.* February 2006. v. 96. pp. 277-282.

Longo, Alberto, and Anna Alberini. "What Are the Effects of Contamination Risks on Commercial and Industrial Properties? Evidence from Baltimore, Maryland." *Journal of Environmental Planning and Management.* September 2006. v.49. pp. 713-751.

Northeast-Midwest Institute. National Association of Local Government Environmental Professionals. *Unlocking Brownfields: Keys to Community Revitalization.* October 2004.

Paull, Evans, "The Environmental and Economic Implications of Brownsfields Redevelopment, Northeast Midwest Institute, July 2008: [http://www.nemw.org/EnvironEconImpactsBFRedev.pdf].

Reisch, Mark. *Superfund and the Brownfields Issue*. Library of Congress, Congressional Research Service Report 97-731 ENR, Washington, DC, 2001.

— . *Brownfield Issues in the 110th Congress.* U.S. Library of Congress. Congressional Research Service. Report RS22575, 2008.

Sterner, Thomas. *Policy Instruments for Environmental and Natural Resource Management.* Resources for the Future, Washington, 2003.

U.S. Congress, Joint Committee on Taxation, General Explanation of Tax Legislation Enacted in the 108th Congtress, Washington, D.C., U.S. Government Printing Office, May 2005, pp. 319-326.

EXCLUSION OF INTEREST ON STATE AND LOCAL QUALIFIED GREEN BUILDING AND SUSTAINABLE DESIGN PROJECT BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1]) Less than $50 million.

Authorization

Section 103, 142(l), and 146(g).

Description

Interest income on State and local bonds used to finance the construction of "green building and sustainable design projects," as designated by the U.S. Environmental Protection Agency (EPA), is tax exempt. Green buildings are evaluated based on these criteria: (1) site sustainability; (2) water efficiency; (3) energy use and atmosphere; (4) material and resource use; (5) indoor environmental quality; and (6) innovative design. The program is designed as a "demonstration" program, and requires that at least one designated project shall be located in or within a 10-mile radius of an empowerment zone and at least one shall be located in a rural State. These bonds are classified as private-activity bonds rather than governmental bonds because a substantial portion of their benefits accrues to individuals or business rather than to the general public. For more discussion of the

distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Bonds issued for green building and sustainable design projects are not, however, subject to the State volume cap on private activity bonds. This exclusion arguably reflects a belief that the bonds have a larger component of benefit to the general public than do many of the other private activities eligible for tax exemption. The bonds are subject to an aggregate face amount of $2 billion and must be issued before October 1, 2012.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to finance green building projects at reduced interest rates.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of both the factors that determine the shares of benefits going to bondholders and users of the green buildings and associated projects, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Proponents of green bonds argue that the federal subsidy is necessary because private investors are unwilling to accept the risk and relatively low return associated with green building projects. Proponents argue that the market has failed to produce green buildings because the benefits of these projects extend well beyond the actual building to the surrounding community and to the environment more generally. The owner of the green building is not compensated for these external benefits, and it is unlikely, proponents argue, that a private investor would agree to provide them without some type of government subsidy.

Assessment

The legislation (P.L. 108-357) that created these bonds was enacted on October 22, 2004, and the success of the program is still uncertain. Before the legislation was enacted, some developers reportedly were voluntarily adhering to green building standards to attract tenants. If so, the market failure described earlier to justify the use of federal subsidy may be less compelling. In addition, as one of many categories of tax-exempt private-

activity bonds, green bonds will likely increase the financing costs of bonds issued for other public capital stock and increase the supply of assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Ho, Cathy Lang. "Eco-fraud: 'Green Buildings' Might Not be all They're Made Out to Be." *Architecture*, v. 92, July 2003, pp. 31-32.

International City-County Management Association. "Green Buildings." *Public Management,* v. 82, May 2000, p. 36.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. Washington, D.C.: March 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. Washington, D.C.: March 2008.

Temple, Judy. "Limitations on State and Local Government Borrowing for Private Purposes." *National Tax Journal*, v. 46, March 1993, pp. 41-53.

Weisbrod, Burton A. *The Nonprofit Economy*. Cambridge, Mass.: Harvard University Press, 1988.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activities*. Washington, DC: The Urban Institute Press, 1991.

REFUNDABLE RESEARCH TAX CREDITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	([1])	([1])
2009	—	0.5	0.5
2010	—	—	—
2011	—	—	—
2012	—	—	—

([1]) Less than $50 million in positive tax expenditures.

Authorization

Sections 41, 53, and 168(k).

Description

As a result of the Economic Stimulus Act of 2008 (P.L. 110-185), business taxpayers may claim a temporary additional first-year depreciation deduction under section 168(k) that is equal to 50 percent of the adjusted basis of qualified property. The deduction may be used under both the regular tax and the alternative minimum tax (AMT). When a business taxpayer claims the additional 50-percent depreciation deduction, the basis of the property and the regular depreciation deductions that may be taken over the property's applicable recovery life must be adjusted to account for the deduction.

To qualify for the 50-percent (or so-called bonus)depreciation allowance, property must satisfy several requirements. First, the property must have a recovery period of 20 years or less under the Modified Accelerated Cost Recovery System (MACRS), or it must be used in a water utility, or it must

qualify as off-the-shelf computer software for business use or as a leasehold improvement. Second, use of any such property must commence with the taxpayer claiming the deduction. Third, the property must be purchased and placed into service during 2008, with a few exceptions. Certain property with a recovery period of 10 or more years and certain transportation property acquired in 2008 may be placed into service in 2009 and still qualify for the bonus depreciation allowance.

In addition, current federal tax law allows business taxpayers to claim a non-refundable tax credit under section 41 for certain research expenditures paid or incurred in conducting a trade or business. The credit has five components: a regular credit, an alternative incremental credit (AIRC), an alternative simplified incremental credit (ASIC), a basic research credit, and an energy research credit. If eligible, a taxpayer may claim one of the first three and one or both of the final two.

Most claims for the credit involve the regular credit, which is equal to 20 percent of qualified research expenditures above a base amount. Use of this credit is subject to several rules that have the effect of undercutting its incentive effect. First, the base amount must be equal to 50 percent or more of qualified research expenditures in the current tax year. Second, any deduction for qualified research expenditures claimed under section 174 must be reduced by the amount of the credit. Third, the credit applies only to qualified expenditures on qualified research. In this case, qualified expenditures refer to outlays for wages, salaries, and supplies used in qualified research conducted in house, time-sharing costs for computers used in such research, and contract research conducted by eligible entities; outlays for structures and equipment used in the conduct of qualified research do not qualify for the credit.

The research tax credit is one of the 31credits that make up the general business credit (GBC) under section 38 — and thus subject to its limitations. Perhaps the most important limitation is that the GBC (computed without regard to some of the credits but with regard to the research tax credit) may not exceed a taxpayer's net income tax less the greater of its tentative minimum tax liability or 25 percent of its net regular tax liability above $25,000. In this case, net income tax means the sum of a taxpayer's regular tax and AMT less certain non-refundable personal credits, and net regular tax liability refers to a taxpayer's regular tax liability reduced by the same credits. If the GBC exceeds this limit, the excess may be carried back one year or forward up to 20 years. A business taxpayer with unused research tax credits when the carryover period expires may deduct those credits in the first tax year following the period.

Section 53 allows corporations that pay the AMT in a tax year to claim a credit for some or all of the amount of the AMT against the regular tax in a later tax year. The credit is limited to a corporation's "adjusted net minimum tax," which is the net minimum tax reduced by the amount that would have

been the net minimum tax if only certain specified preferences and adjustments had been taken into account. Unused AMT credits may be carried forward indefinitely.

Under section 168(k)(4), any corporation that acquires from April 1, 2008 to December 31, 2008 property eligible for the bonus depreciation deduction may elect to forgo it and instead claim a refundable credit for a portion of any unused GBCs that is due to research tax credits from tax years before 2006. The corporation may also claim a refundable credit for a portion of any unused AMT credits from the same tax years in lieu of the additional first-year depreciation deduction.

For the tax year when the qualified property is placed into service, the total amount of unused research and AMT credits a corporate taxpayer may claim is equal to the "bonus depreciation amount" for that year. This amount is defined as the lesser of 20 percent of the difference between the bonus depreciation allowance for the property and the MACRS depreciation allowance that could be claimed in the absence of the bonus depreciation allowance; 6 percent of the sum of unused research and AMT credits from tax years starting before 2006; or $30 million.

To claim a refundable credit for an unused research credit, a corporation simply increases its tax liability limitation under the GBC by the bonus depreciation amount. This amount cannot exceed the firm's unused pre-2006 research credits reduced by any amount allocated to the tax liability limitation under this provision for earlier tax years.

Corporations claiming a refundable credit are required to depreciate the property eligible for the bonus depreciation allowance using the straight-line method over the applicable recovery period under the MACRS.

Impact

The provision allows corporations investing in assets eligible for the bonus depreciation allowance in 2008 to cash in or monetize a portion of any unused research or AMT credits from tax years before 2006.

The tax expenditure tied to the provision lies in the net revenue cost of choosing the refundable credit instead of the bonus depreciation allowance for 2008.

Rationale

Congress created the provision through the Housing and Economic Recovery Act of 2008 (P.L. 110-289). It appeared to be intended to increase business investment by expanding the cash flow of corporations with net

operating losses that purchased assets eligible for the bonus depreciation allowance in 2008. The provision was enacted when growth in the U.S. economy was slowing sharply.

Assessment

The bonus depreciation allowance and the option to claim a refundable credit for unused research and AMT credits are due to expire at the end of 2008. Though it is too early to offer a definitive assessment of the economic stimulus provided by the credit or its desirability as a policy instrument for stimulating business investment or reviving faltering companies, its likely economic effects can be discussed.

The refundable credit can be claimed whether or not an eligible corporation has a tax liability. So corporations with net operating losses in 2008 that invest in assets eligible for the bonus depreciation allowance could receive it as a cash subsidy from the Internal Revenue Service. Given that a larger deduction would serve only to increase a corporation's net operating loss, it would appear that such a firm might be better off in the short term taking the refundable credit in lieu of the bonus depreciation allowance. Yet several other considerations are likely to influence the decision to take the credit. Corporations that choose the credit effectively exchange a future flow of accelerated depreciation deductions for an infusion of cash in the present. A corporation anticipating a return to profitability in the near term may be better off taking the bonus depreciation deduction and forgoing the credit.

Supporters of the provision say that in combination with the temporary bonus depreciation allowance, it could boost business output and hiring at a relatively modest revenue cost. They contend that it is especially likely to be used by corporations with net operating losses in 2008 that continue to invest in assets eligible for the allowance, even though they have little reason to expect to become profitable again in the near term. The provision allows each corporation that takes advantage of it to receive a federal tax refund of up to $30 million in exchange for relinquishing depreciation allowances that may be of little or no benefit in the next few years. Generally, a refundable credit is of greater value than a deduction to firms with net operating losses.

There are some who disagree with this view of the provision's likely impact. Critics argue that while it may help some smaller corporations survive the current economic downturn, the provision's impact is likely to be too modest and limited to spur a sustained expansion of business investment or employment in the midst of a substantial contraction in overall economic activity. The estimated revenue effect of the refundable tax credit lends some empirical support to this argument: a revenue loss of $500 million in 2009 only. In addition, critics say that the credit is likely to amplify the likely effect of the bonus depreciation allowance on the timing of corporate investments in qualified assets. They note that the allowance

gives firms an incentive to accelerate planned investments to take advantage of it, perhaps raising business investment in years when the allowance applies and deflating it in subsequent years. A more effective approach to stimulating the economy, say critics, is for the federal government to boost funding in ways that deliver a greater bang for the buck than business tax incentives, such as temporary increases in food stamp benefits or extended unemployment insurance benefits.

Selected Bibliography

Batchelder, Lily L., Fred T. Goldberg, Jr., and Peter R. Orzag. *Reforming Tax Incentives into Uniform Refundable Tax Credits*. Brookings Institution Policy Brief #156, Washington. DC: August 2006.

Billings, B. Anthony and Buagu Musazi. "Monetize Tax Assets to Improve Bonus Depreciation Incentive." *Tax Notes*, April 21, 2008, pp. 299-301.

Coder, Jeremiah. "Corporations Await Guidance on New Research Credit Election." *Tax Notes*, vol. 121, October 13, 2008, p. 148.

Cohen, Darrel and Jason Cummins. *A Retrospective Evaluation of the Effects of Temporary Partial Expensing*. Federal Reserve Board, Divisions of Research and Statistics and Monetary Affairs, Working Paper 2006-19, Washington, DC: April 2006.

Gravelle, Jane G. *Using Business Tax Cuts to Stimulate the Economy*. Library of Congress, Congressional Research Service Report RL31134. Washington, DC: February 19, 2008.

Guenther, Gary. *Research and Experimentation Tax Credit: Current Status and Selected Issues for Congress*. Library of Congress, Congressional Research Service Report RL31181. Washington, DC: October 6, 2008.

Huang, Chye-Ching and Chad Stone. *Bonus Depreciation Tax Cut Unlikely to Provide Effective Economic Stimulus*. Center on Budget and Policy Priorities, Washington, DC: September 10, 2008.

Jones, George G. and Mark A Luscombe. "Tax Strategy: Tax Planning for Businesses in a Troubled Economy." *Accounting Today*, vol. 22, no. 17, September 22, 2008, p. 12.

Watts, Michael M. and Stephanie Farewell. "Measuring the Incentive in 50 Percent Bonus Depreciation." *Tax Notes*, August 18, 2008, pp. 677-682.

60-40 RULE FOR GAIN OR LOSS FROM SECTION 1256 CONTRACTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.2	0.1	2.3
2009	2.1	0.1	2.2
2010	2.4	0.1	2.5
2011	1.8	0.1	1.9
2012	1.9	0.1	2.0

Authorization

Section 1256

Description

A Section 1256 contract is any regulated futures contract, foreign currency contract, nonequity option, dealer equity option, or dealer securities futures contract that is traded on a qualified board of exchange with a mark-to-market accounting system. Under this mark-to-market rule, the gains and losses must be reported on an annual basis, for tax purposes.

The capital gain or loss of applicable contracts are treated as consisting of 40 percent short-term and 60 percent long-term gain or loss. This is true regardless of how long the contract is held. The 60/40 rule does not apply to hedging transactions or limited partnerships. A hedging transaction is a transaction done by a business in its normal operation with the primary purpose of reducing certain risks.

Impact

The application of mark-to-market accounting to Section 1256 contracts eliminates deferral that would result under traditional realization principles. As a result, those who hold Section 1256 contracts may face a higher effective tax rate, than those who hold assets taxed on realization principles.

Rationale

The Economic Recovery Tax Act of 1981, P.L. 97-34, established that all regulated futures contracts must be valued on an annual basis using a mark-to-market method, to overcome the tax sheltering impact of certain commodity futures trading strategies and to harmonize the tax treatment of commodities futures contracts with the realities of the marketplace under what Congress referred to as the doctrine of constructive receipt.

The Deficit Reduction Act of 1984, P.L. 98-369, and the Tax Reform Act of 1986 (P.L. 99-514) extended the mark-to-market rule to non-equity listed options, dealers' equity options, and increased the information required for banks qualify for the exemption for hedging. Rules were provided to prevent limited partners (or entrepreneurs) of an options dealer from recognizing gain or loss from equity options as 60 percent long-term capital gain or loss and 40 percent short-term capital gain or loss. Theses changes have been motivated by Congress wanting consistent tax treatment for economically similar contracts — or horizontal equity concerns, at least when pricing was readily available.

Assessment

The application of Section 1256 rules results in gains (losses) being overstated (understated) in the current year and understated (overstated) in the year of realization. The net result is that the tax liability is overstated when gains are recorded prior to realization and understated when losses are recorded prior to realization, due to the time value of money.

Selected Bibliography

Feder, Michael J., L.G. "Chip" Harter, and David H. Shapiro., "Notice 2003-81: Are OTC Currency Options Section 1256 Contracts?," *Tax Notes,* Dec. 23, 2003, pp.1470-1472.

Keinan, Yoram, "Book Tax Conformity for Financial Instruments," *Florida Tax Review.* vol. 6 no. 7, (2004), pp. 678-756.

Miller, David S., "A Progressive System of Mark-to-Market Taxation," *Tax Notes*, Oct. 13, 2008, pp. 213-218.

Testimony of William M. Paul, in U.S. Congress, House Committee on Ways and Means, *Hearing on the Tax Treatment of Derivatives,* 110th Cong., 2nd sess., March 5, 2008.

U.S. Congress, Joint Committee on Taxation, *Technical Explanation of the Tax Provisions of H.R. 4541, the "Commodities Futures Modernization Act of 2000*, (Washington, DC, GPO, 2000), pp. 2-9.

U.S. Department of the Treasury, Internal Revenue Service, *Investment Income and Expenses*, Publication 550, 2007, pp. 39-41. Zelnick, John, and Dale Collinson, "IRS Clears Uncertainty for Over-the-Counter Currency Options," *Tax Notes,* Dec. 17, 2007, pp. 1152-1154.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT BONDS FOR HIGHWAY PROJECTS AND RAIL-TRUCK TRANSFER FACILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1]) Less than $50 million.

Authorization

Sections 103, 141, 142(m), and 146.

Description

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, P.L. 109-59, enacted on August 10, 2005, created a new class of tax-exempt, qualified private activity bonds for the financing of qualified highway or surface freight transfer facilities. Qualified facilities include: (1) any surface transportation project which receives federal assistance under title 23; (2) any project for an international bridge or tunnel for which an international entity authorized under federal or State law is responsible and which receives federal assistance under title 23; and (3) any facility for the transfer of freight from truck to rail or rail to truck (including any temporary storage facilities directly related to such transfers) which receives federal assistance under title 23 or title 49. The bonds used to finance these facilities are classified as private-activity bonds rather than governmental bonds because a substantial portion of the benefits generated

by the project(s) accrue to individuals or business rather than to the government. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Bonds issued for qualified highway or surface freight transfer facilities are not subject to the federally imposed annual State volume cap on private-activity bonds. The bonds are capped, however, by a national limitation of $15 billion to be allocated at the discretion of Secretary of Transportation.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low-interest rates allow issuers to construct highway or surface freight transfer facilities at lower cost. Some of the benefits of the tax exemption and federal subsidy also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and users of the highway or surface freight transfer facilities, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Before 1968, State and local governments were allowed to act as conduits for the issuance of tax-exempt bonds to finance privately owned and operated facilities. The Revenue and Expenditure Control Act of 1968 (RECA 1968), however, imposed tests that restricted the issuance of these bonds. The Act provided a specific exception which allowed issuance for specific projects such as non-government-owned docks and wharves. Intermodal facilities are similar in function to docks and wharves, yet were not included in the original list of qualified facilities. The addition of truck-to-rail and rail-to-truck intermodal projects to the list of qualified private activities in 2005 is intended to enhance the efficiency of the nation's long distance freight transport infrastructure. With more efficient intermodal facilities, proponents suggest that long distance truck traffic will shift from government financed interstate highways to privately owned long distance rail transport.

Assessment

State and local governments tend to view these facilities as potential economic development tools. The desirability of allowing these bonds to be eligible for tax-exempt status hinges on one's view of whether the users of such facilities should pay the full cost, or whether sufficient social benefits exist to justify federal taxpayer subsidy. Economic theory suggests that to the extent these facilities provide social benefits that extend beyond the boundaries of the State or local government, the facilities might be underprovided due to the reluctance of State and local taxpayers to finance benefits for nonresidents.

Even if a case can be made for a federal subsidy arising from underinvesting at the State and local level, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, those issued for transfer facilities increase the financing cost of bonds issued for other public capital. With a greater supply of public bonds, the interest rate on the bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds increases the assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

TAX CREDIT FOR CERTAIN RAILROAD TRACK MAINTENANCE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.1	0.1
2009	-	0.1	0.1
2010	-	([1])	([1])
2011	-	([1])	([1])
2012	-	([1])	([1])

(1) Positive tax expenditure of less than $50 million.

Authorization

Section 45G.

Description

Qualified railroad track maintenance expenditures paid or incurred in a taxable year by eligible taxpayers are eligible for a 50-percent business tax credit. The credit is limited to $3,500 times the number of miles of railroad track owned or leased by an eligible taxpayer. Railroad track maintenance expenditures are amounts, which may be either repairs or capitalized costs, spent to maintain railroad track (including roadbed, bridges, and related track structures) owned or leased as of January 1, 2005, by a Class II or Class III railroad. Eligible taxpayers are smaller (Class II or Class III) railroads and any person who transports property using these rail facilities or furnishes property or services to such a person.

The taxpayer's basis in railroad track is reduced by the amount of the credit allowed (so that any deduction of cost or depreciation is only on the cost net of the credit). The credit cannot be carried back to years before

2005. The credit expires at the end of 2009 and can be taken against the alternative minimum tax.

The amount eligible is the gross expenditures not taking into account reductions such as discounts or loan forgiveness.

Impact

This provision substantially lowers the cost of track maintenance for the qualifying short line (regional) railroads, with tax credits covering half the costs for those firms and individuals with sufficient tax liability. According to the Federal Railroad Administration, as of the last survey in 1993, these railroads accounted for 25% of the nation's rail miles. These regional railroads are particularly important in providing transportation of agricultural products.

Rationale

This provision was enacted as part of the American Jobs Creation Act of 2004 (P.L. 108-357), effective through 2007. While no official rationale was provided in the bill, sponsors of earlier free-standing legislation and industry advocates indicated that the purpose was to encourage the rehabilitation, rather than the abandonment, of short line railroads, which were spun off in the deregulation of railroads in the early 1980s. Advocates also indicated that this service is threatened by heavier 286,000-pound cars that must travel on these lines because of inter-connectivity. They also suggested that preserving these local lines will reduce local truck traffic. These is also some indication that a tax credit was thought to be more likely to be achieved than grants.

The provision relating to discounts was added by the Tax Relief and Health Care Act (P.L. 109-432), December 2006. The provision was extended through 2009, and the credit allowed against the alternative minimum tax by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343) enacted in October 2008.

Assessment

The arguments stated by the industry advocates and sponsors of the legislation are also echoed in assessments by the Federal Railroad Administration (FRA), which indicated the need for rehabilitation and improvement, especially to deal with heavier cars. The FRA also suggested that these firms have particular difficulty with access to bank loans.

In general, special subsidies to industries and activities tend to lead to inefficient investment allocation since in a competitive economy businesses should earn enough to maintain their capital. Nevertheless it may be judged or considered desirable to subsidize rail transportation in order to reduce the congestion and pollution of highway traffic. At the same time, a tax credit may be less suited to remedy the problem than a direct grant since firms without sufficient tax liability cannot use the credit.

Selected Bibliography

Prater, Marvin, *The Long Term Viability of Short Line and Regional Railroads.* U.S. Department of Agriculture, Agricultural Marketing Services, Washington, DC, July 1998.

Shreve, Meg. "I Hear the Train A-Comin': The Railroad Maintenance Track Credit," *Tax Notes*, Vol.119, April 7, 2008, pp. 11-13.

U.S. Congress, House, *Conference Report on the American Jobs Creation Act*, Report 108-77, Washington, DC: U.S. Government Printing Office, 2004.

U.S. Department of Transportation, Federal Railroad Administration. *Need for Railroad Rehabilitation and Improvement Financing*. Available http://www.fra.dot.gov/us/home.

DEFERRAL OF TAX ON CAPITAL CONSTRUCTION FUNDS OF SHIPPING COMPANIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.1	0.1
2009	([1])	0.1	0.1
2010	([1])	0.1	0.1
2011	([1])	0.1	0.1
2012	([1])	0.1	0.1

([1])Less than $50 million.

Authorization

Section 7518.

Description

U.S. operators of vessels in foreign, Great Lakes, or noncontiguous domestic trade, or in U.S. fisheries, may establish a capital construction fund (CCF) into which they may make certain deposits. Such deposits are deductible from taxable income, and income tax on the earnings of the deposits in the CCF is deferred.

When tax-deferred deposits and their earnings are withdrawn from a CCF, no tax is paid if the withdrawal is used for qualifying purposes, such as to construct, acquire, lease, or pay off the indebtedness on a qualifying vessel. A qualifying vessel must be constructed or reconstructed in the United States, and any lease period must be at least five years.

The tax basis of the vessel (usually its cost to the owner), with respect to which the operator's depreciation deductions are computed, is reduced by the

amount of such withdrawal. Thus, over the life of the vessel tax depreciation will be reduced, and taxable income will be increased by the amount of such withdrawal, thereby reversing the effect of the deposit. However, since gain on the sale of the vessel and income from the operation of the replacement vessel may be deposited into the CCF, the tax deferral may be extended.

Withdrawals for other purposes are taxed at the top tax rate. This rule prevents firms from withdrawing funds in loss years and escaping tax entirely. Funds cannot be left in the account for more than 25 years.

Impact

The allowance of tax deductions for deposits can, if funds are continually rolled over, amount to a complete forgiveness of tax. Even when funds are eventually withdrawn and taxed, there is a substantial deferral of tax that leads to a very low effective tax burden. The provision makes investment in U.S.-constructed ships and registry under the U.S. flag more attractive than it would otherwise be. Despite these benefits, however, there is very little (in some years, no) U.S. participation in the worldwide market supplying large commercial vessels.

The incentive for construction is perhaps less than it would otherwise be, because firms engaged in international shipping have the benefits of deferral of tax through other provisions of the tax law, regardless of where the ship is constructed. This provision is likely to benefit higher-income individuals who are the primary owners of capital (see Introduction for a discussion).

Rationale

The special tax treatment originated to ensure an adequate supply of shipping in the event of war. Although tax subsidies of various types have been in existence since 1936, the coverage of the subsidies was expanded substantially by the Merchant Marine Act of 1970.

Before the Tax Reform Act of 1976 it was unclear whether any investment tax credit was available for eligible vessels financed in whole or in part out of funds withdrawn from a CCF. The 1976 Act specifically provided (as part of the Internal Revenue Code) that a minimum investment credit equal to 50 percent of an amount withdrawn to purchase, construct, or reconstruct qualified vessels was available in 1976 and subsequent years.

The Tax Reform Act of 1986 incorporated the deferral provisions directly into the Internal Revenue Code. It also extended benefits to leasing, provided for the minimum 25-year period in the fund, and required payment of the tax at the top rate.

Assessment

The failure to tax income from the services of shipping normally misallocates resources into less efficient uses, although it appears that the effects on U.S. large commercial shipbuilding are relatively small.

There are two possible arguments that could be advanced for maintaining this tax benefit. The first is the national defense argument — that it is important to maintain a shipping and shipbuilding capability in time of war. This justification may be in doubt today, since U.S. firms control many vessels registered under a foreign flag and many U.S. allies control a substantial shipping fleet and have substantial ship-building capability that might be available to the U.S.

There is also an argument that subsidizing domestic ship-building and flagging offsets some other subsidies — both shipbuilding subsidies that are granted by other countries, and the deferral provisions of the U.S. tax code that encourage foreign flagging of U.S.-owned vessels. Economic theory suggests, however, that efficiency is not necessarily enhanced by introducing further distortions to counteract existing ones.

Selected Bibliography

Jantscher, Gerald R. Chapter VI — "Tax Subsidies to the Maritime Industries," *Bread Upon The Waters: Federal Aids to the Maritime Industries*. Washington, DC: The Brookings Institution, 1975.

Madigan, Richard E. *Taxation of the Shipping Industry*. Centreville, MD: Cornell Maritime Press, 1982.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986*, Committee Print, 99th Congress, 2nd session. May 4, 1987, pp. 174-176.

U.S. Department of Treasury. *Tax Reform for Fairness, Simplicity, and Economic Growth,* Volume 2, General Explanation of the Treasury Department Proposals. November, 1974, pp. 128-129.

Transportation

EXCLUSION OF EMPLOYER-PAID TRANSPORTATION BENEFITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	4.0	-	4.0
2009	4.1	-	4.1
2010	4.3	-	4.3
2011	4.9	-	4.9
2012	5.2	-	5.2

Authorization

Section 132(f).

Description

Some transportation benefits given to employees by employers are tax exempt. The value of transit passes provided directly by the employer can be excluded from employees' income, subject to a monthly limit. This limit was set at $100 per month for 2001. Each year the limit is adjusted for inflation, and the adjustment is rounded to the nearest $5. In 2009, the limit was $120 per month. A similar exclusion applies to van pools. The limit applies to the total of van pool costs and transit passes. The value of employer-provided parking facilities can be excluded from employee's income, subject to a monthly limit. This limit, initially set to $175 per month in 1998, is adjusted for inflation each year. In 2009, the limit was $230 per month. An employee taking the parking facility tax benefit cannot also receive a van pool or transit benefit.

Employers may provide benefits as a credit on a transit pass or "smartcard" used on some transit systems. Employers may provide these benefits in cash, subject to a compensation reduction arrangement, only if the benefits cannot be provided readily through a transit pass or a voucher.

These measures were imposed in part to prevent employees from reselling transportation vouchers for cash.

Impact

Exclusion from taxation of transportation fringe benefits provides a subsidy to employment in those businesses and industries in which such fringe benefits are common and feasible. The subsidy benefits both employees, through higher compensation, and their employers, who may face lower wage costs. To the extent that this exemption induces employees to use mass transportation and to the extent that mass transportation reduces traffic congestion, this exemption lowers commuting costs to all workers in urban areas.

Higher income individuals are more likely to benefit from the parking exclusion than the mass transit and van pool subsidies to the extent that the propensity to drive to work is correlated with income. The effective value of the transit benefits rise with marginal tax rate of a recipients. The value of the benefit also depends on the location of the employer: the provision is targeted towards the taxpayers working in the highly urbanized areas or other places where transit is available or parking space is limited.

Rationale

A statutory exclusion for the value of parking was introduced in 1984, along with exclusions for several other fringe benefits. Some employers had provided one or more of these fringe benefits for many years, and employers, employees, and the Internal Revenue Service had not considered those benefits to be taxable income.

The Comprehensive Energy Policy Act of 1992 placed a dollar ceiling on the exclusion of parking facilities and introduced the exclusions for mass transit facilities and van pools in order to encourage mass commuting, which would in turn reduce traffic congestion and pollution. In 1998, the Transportation Equity Act for the 21st Century raised the benefit limits and modified their phase-in periods and inflation adjustment rules. Employees at that time could also choose to receive cash instead of transit benefits.

Many employers used fringe benefits during World War II to attract workers because wage and price controls limited their ability to compete for labor. A generation later, Congress sought to limit the use of tax-free fringe benefits such as employer-provided transportation benefits. After the Treasury Department proposed and then withdrew regulations regarding the tax treatment of certain fringe benefits, Congress in 1978 imposed a moratorium, which was extended in 1981, on such regulations. In the Deficit Reduction Act of 1984, Congress introduced new rules governing the tax

treatment of fringe benefits. At that time, Congress expressed concern that without clear boundaries on the use of these fringe benefits, new approaches could emerge that would further erode the tax base and increase inequities among employees in different businesses and industries.

Assessment

The exclusion subsidizes employment in those businesses and industries located where transportation fringe benefits are feasible and commonly used. Businesses and industries located where mass transportation alternatives are lacking gain little or no benefit from this provision.

Subsidies for mass transit and van pools encourage use of mass transportation and may reduce congestion and pollution. Motivating commuters in highly urbanized areas to use mass transportation can reduce commuting costs generally. If workers commute in ways that reduce traffic congestion, all commuters in an area may enjoy spillover benefits such as lower transportation costs, shorter waiting times in traffic, and improved air quality.

Determining fair market values for fringe benefits such as free or reduced price parking may be difficult in some places. Most highly urbanized areas, however, have many commercial parking lots, so that calculating comparable value of a parking benefits in those areas may be straightforward.

Fringe benefits are part of the total compensation package that employees receive and that employers provide to compete in labor markets. If some fringe benefits, such as transportation benefits, are not considered taxable income, then both employers and firms may wish to reduce taxable wages and salaries in order to increase untaxed fringe benefits. The tax exclusion of such fringe benefits may motivate employees and employers to design compensation packages that increase the consumption of goods and services provided as tax-favored fringe benefits relative to goods and services bought with taxable ordinary income.

Selected Bibliography

Gazur, Wayne M. "Assessing Internal Revenue Code Section 132 After Twenty Years," *Virginia Tax Review*, vol. 25, pp. 977-1046.

Hevener, Mary B. "Energy Act Changes to Transportation Benefits, Travel Expenses, and Backup Withholding." *The Tax Executive*, November-December 1992, pp. 463-466.

Kies, Kenneth J. "Analysis of the New Rules Governing the Taxation of Fringe Benefits," *Tax Notes,* vol. 38. September 3, 1984, pp. 981-988.

McKinney, James E. "Certainty Provided as to the Treatment of Most Fringe Benefits by Deficit Reduction Act," *Journal of Taxation*. September 1984, pp. 134-137.

Sunley, Emil M., Jr. "Employee Benefits and Transfer Payments," *Comprehensive Income Taxation*, ed. Joseph A. Pechman. Washington, DC: The Brookings Institution, 1977, pp. 90-92.

Turner, Robert W. "Fringe Benefits," in *The Encyclopedia of Taxation and Tax Policy (2nd ed.)*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

U.S. General Accounting Office. *Mass Transit: Effects of Tax Changes on Commuter Behavior*, RCED-92-243, September 8, 1992, available at [http://archive.gao.gov/d35t11/147754.pdf].

— , *Federal Transit Benefits Program: Ineffective Controls Result in Fraud and Abuse by Federal Workers*, GAO-07-724T, April 24, 2007, available at [http://www.gao.gov/new.items/d07724t.pdf].

U.S. Internal Revenue Service. *Employer's Tax Guide to Fringe Benefits For Benefits: For Use in 2008*. Publication 15-B, revised January 2004, available at [http://www.irs.gov/pub/irs-pdf/p15b.pdf].

— , Revenue Procedure 2003-85, December 8, 2003.

— ,Revenue Ruling 2006-57, November 20, 2006, available at [http://www.irs.gov/pub/irs-irbs/irb06-47.pdf].

— , Final Regulation (T.D. 8933) on Qualified Transportation Fringe Benefits, January 11, 2001.

U.S. Congress, House. *Comprehensive National Energy Policy Act*, Report 102-474, 102d Congress, 2d Session, May 5, 1992.

— , Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Committee Print, 98th Congress, 2nd session. December 31, 1984, pp. 838-866.

— , Joint Committee on Taxation. *Estimated Budget Effects of the Conference Agreement Relating to the Transportation Revenue and Trust Fund Provisions of H.R. 2400 (Title IX).* JCX-43-98. May 22, 1998.

— , Senate Committee on Finance. *Fringe Benefits*, Hearings, 98th Congress, 2nd session. July 26, 27, 30, 1984.

EMPOWERMENT ZONE TAX INCENTIVES, DISTRICT OF COLUMBIA TAX INCENTIVES, AND INDIAN RESERVATION TAX INCENTIVES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.6	0.6	1.2
2009	0.7	0.5	1.2
2010	0.3	0.2	0.5
2011	0.1	(1)	0.1
2012	0.1	(1)	0.1

([1])Less than $50 million.

Authorization

Sections 38(b), 39(d),45A, 168(j), 280C(a), 1391-1397D, 1400-1400B.

Description

Empowerment Zone (EZ) and Enterprise Community (EC) tax incentives were originally created by the Omnibus Budget Reconciliation Act of 1993 and expanded by the Taxpayer Relief Act of 1997 (TRA). The EZ/EC program was expanded again by the Community Renewal Act of 2000. That act also harmonized the eligibility rules for EZs/ECs and created a new geography-based tax incentive program for so-called Renewal Communities (RC). There are currently authorized 40 EZs (30 urban and 10 rural), 95 ECs (65 urban and 30 rural), and 40 RCs (28 urban and 12 rural). The District of Columbia EZ was also authorized in the TRA and is afforded the same tax incentives as the other EZs. The DC Enterprise Zone incentives were extended through December 31, 2005 by P.L. 108-311, through 2007 by P.L. 109-432 and through 2009 by P.L. 110-343.

Designated areas must satisfy eligibility criteria including poverty rates and population and geographic size limits; they will be eligible for benefits through December 31, 2009.

For empowerment zones, the tax incentives include a 20 percent employer wage credit for the first $15,000 of wages for zone residents who work in the zone, $35,000 in expensing of equipment in investment (in addition to the amount allowed generally) in qualified zone businesses, and expanded tax exempt financing for certain zone facilities, primarily qualified zone businesses.

In addition, qualified public schools in enterprise communities and empowerment zones are allowed access to qualified zone academy bonds (QZABs). QZABs are bonds designated for school modernization and renovation where the federal government offers annual tax credits to the bondholders in lieu of interest payments from the issuer. The Federal Government is effectively paying the interest on the bonds for the state or local governments. For more on QZABs, see the tax expenditure entry "Tax Credit for Holders of Qualified Zone Academy Bonds" under the Education, Training, Employment, and Social Services heading.

Businesses in RCs are allowed a 15 percent wage credit on the first $10,000 of wages for qualified workers and an additional $35,000 in capital equipment expensing. These qualified businesses are also allowed partial deductibility of qualified buildings placed in service. Renewal community tax benefits are available through December 31, 2009.

Enterprise communities receive only the tax exempt financing benefits. Tax exempt bonds for any one community cannot exceed $3 million and bonds for any one user cannot exceed $20 million for all zones or communities. Businesses eligible for this financing are subject to limits that target businesses operating primarily within the zones or communities.

Businesses on Indian reservations are eligible for accelerated depreciation and for a credit for 20 percent of the cost of the first $20,000 of wages (and health benefits) paid by the employer to tribal members and their spouses, in excess of eligible qualified wages and health insurance cost payments made in 1993. These benefits are available for wages paid, and for property placed in service before December 31, 2007.

In 1997 several tax incentives for the District of Columbia were adopted: a wage tax credit of $3,000 per employee for wages paid to a District resident, tax-exempt bond financing, and additional first-year expensing of equipment. These apply to areas with poverty rates of 20 percent or more. There is also a zero capital gains rate for business sales in areas with 10 percent poverty rates. Those provisions were originally available through December 31, 2007 and subsequently extended through 2009 by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343). (A credit

for first-time home buyers adopted at that time is discussed under the Commerce and Housing heading.)

Impact

Both businesses and employees within the designated areas may benefit from these provisions. Wage credits given to employers can increase the wages of individuals if not constrained by the minimum wage, and these individuals tend to be lower income individuals. If the minimum wage is binding (so that the wage does not change) the effects may show up in increased employment and/or in increased profits to businesses.

Benefits for capital investments may be largely received by business owners initially, although the eventual effects may spread to other parts of the economy. Eligible businesses are likely to be smaller businesses because they must operate within the designated area.

Rationale

These geographically targeted tax provisions were adopted in 1993, although they had been under discussion for some time and had been included in proposed legislation in 1992. Interest in these types of tax subsidies increased after the 1992 Los Angeles riots.

The objective of the subsidies was to revitalize distressed areas through expanded business and employment opportunities, especially for residents of these areas, in order to alleviate social and economic problems, including those associated with drugs and crime. Some of these provisions are temporary and have been extended, most recently in the Emergency Economic Stabilization Act of 2008 (P.L. 110-343).

Assessment

The geographically targeted tax provisions may encourage increased employment and income of individuals living and working in the zones and increased incentives to businesses working in the zones. The small magnitude of the program may be appropriate to allow time to assess how well such benefits are working; current evidence does not provide clear guidelines.

If the main target of these provisions is an improvement in the economic status of individuals currently living in these geographic areas, it is not clear to what extent these tax subsidies will succeed in that objective. None of the subsidies are given directly to workers; rather they are received by businesses. Capital subsidies may not ultimately benefit workers; indeed, it

is possible that they may encourage more capital intensive businesses and make workers worse off. In addition, workers cannot benefit from higher wages resulting from an employer subsidy if the wage is determined by regulation (the minimum wage) and already artificially high. Wage subsidies are more likely than capital subsidies to be effective in benefitting poor zone or community residents.

Another reservation about enterprise zones is that they may make surrounding communities, that may also be poor, worse off by attracting businesses away from them. And, in general, questions have been raised about the efficiency of provisions that target all beneficiaries in a poor area rather than poor beneficiaries in general.

Selected Bibliography

Bondino, Daniele and Robert T. Greenbaum, "Decomposing the Impacts: Lessons from a Multistate Analysis of Enterprise Zone Programs," *John Glenn Working Paper Series*, The Ohio State University, Working Paper, June 2005.

— , "Do Tax Incentives Affect Local Economic Growth? What Means Impacts Miss in the Analysis of Enterprise Zone Policies," *Regional Science and Urban Economics,37(1),* 2007, pp.121-136.

Cordes, Joseph J., and Nancy A. Gardner. "Enterprise Zones and Property Values: What We Know (Or Maybe Don't)." National Tax Association *Proceedings, 94th Annual Conference on Taxation*. Washington, DC: National Tax Association, 2002, pp. 279-287.

Couch, Jim F., and J. Douglas Barrett. "Alabama's Enterprise Zones: Designed to Aid the Needy?" *Public Finance Review*, v. 32, no. 1 (January 2004), pp. 65-81.

— , Keith E. Atkinson, and Lewis H. Smith, "The Impact of Enterprise Zones on Job Creation in Mississippi," *Contemporary Economic Policy*, v. 23, April, 2005, pp. 255-260.

Fisher, Peter S., and Alan H. Peters. "Tax and Spending Incentives and Enterprise Zones." *New England Economic Review* (March-April 1997), pp. 109-130.

Garrison, Larry R. "Tax Incentives for Doing Business on Indian Reservations." *Taxes — The Magazine* (May 2002), pp. 39-44.

Greenbaum, Robert. "Siting it Right: Do States Target Economic Distress When Designating Enterprise Zones?" *Economic Development Quarterly* (February 2004), pp. 67-80.

Greenbaum, Robert T. and John B. Engberg, "The Impact of State Enterprise Zones on Urban Manufacturing Establishments," *Journal of Policy Analysis and Management*, v. 23, spring 2004, pp. 315-339.

Hirasuna, Don and Joel Michel, "Enterprise Zones: A Review of the Economic Theory and Empirical Evidence, "Policy Brief, Minnesota House of Representatives Research Department, January 2005.

Papke, Leslie. "Enterprise Zones," in *The Encyclopedia of Taxation and Tax Policy*, ed. Joseph J. Cordes, Robert W. Ebel, and Jane G. Gravelle (Washington, D.C.: The Urban Institute, 2005).

— . "What Do We Know About Enterprise Zones?" In *Tax Policy and the Economy V. 7*, ed. James Poterba, National Bureau of Economic Research, Cambridge: MIT Press, 1993.

Rogers, Cynthia and Jill L. Tao, "Quasi-Experimental Analysis of Targeted Economic Development Programs: Lessons from Florida," *Economic Development Quarterly*, v. 18, August 2004, pp. 269-285.

Stoker, Robert P. And Michael J. Rich. "Lessons and Limits: Tax Incentives and Rebuilding the Gulf Coast After Katrina," *The Brookings Institution, Survey Series*, August 2006.

Sullivan, Martin A. *D.C.: A Capitalist City?* Arlington, VA: Tax Analysts, 1997.

U.S. Congress, House Committee on Banking, Finance and Urban Affairs, Subcommittee on Economic Growth and Credit Formation. *The Administration's Empowerment Zone and Enterprise Community Proposal.* Hearing, 103d Congress, 1st Session, May 27 and June 8, 1993.

— , Joint Committee on Taxation. *Description of Present Law Regarding Tax Incentives for Renewal Communities and Other Economically Distressed Areas*. (JCX-40-02), May 20, 2002.

— , Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in 1997*. 105th Congress, 1st Session. Washington, DC: U.S. Government Printing Office, December 17, 1997.

U.S. Government Accountability Office, *Empowerment Zone and Enterprise Community Program: Improvements Occurred in Communities, but the Effect of the Program is Unclear*, GAO-06-727, September 2006.

U.S. Department of Housing and Urban Development, *Interim Assessment of the Empowerment Zones and Enterprise Community (EZ/EC) Program: A Progress Report and Appendices*, November 2001.

Wilder, Margaret G. and Barry M. Rubin, "Rhetoric versus Reality: A Review of Studies on State Enterprise Zone Programs." *Journal of the American Planning Association*, v. 62, Autumn, 1996, pp. 473-490.

Community and Regional Development

NEW MARKETS TAX CREDIT AND RENEWAL COMMUNITY TAX INCENTIVES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.9	0.7	1.6
2009	0.9	0.6	1.5
2010	0.7	0.5	1.2
2011	0.6	0.5	1.1
2012	0.6	0.5	1.1

Authorization

Sections 45D, 1400F, 1400H, 1400I, and 1400J.

Description

The New Markets Tax Credit (NMTC) is designed to stimulate investment in low-moderate income rural and urban communities nationwide. NMTCs are allocated by the Community Development Financial Institutions (CDFI) Fund, a bureau within the United States Department of the Treasury, under a competitive application process. Investors who make qualified equity investments reduce their federal income tax liability by claiming a credit equal to 39 percent of their investment, over a seven year period. The NMTC program, enacted in 2000, is currently authorized to allocate $23 billion through the end of 2009. The maximum amount of annual investment eligible for the credit is $2.5 billion in 2003; $3.5 billion in 2004; $2.0 billion in 2005; $4.1 billion in 2006; $3.9 billion in 2007 and $3.5 billion in 2008 and 2009. The 2006 and 2007 totals include increased allocations targeted for areas affected by Hurricane Katrina of $600 million and $400 million, respectively.

In contrast to the NMTC, Renewal Community (RC) tax incentives target businesses directly. The four RC tax incentives for businesses are (1) that gains from the sale of assets designated as RC business are taxed at 0 percent, (2) that a qualified RC business is eligible for a Federal tax credit worth 15 percent of the first $10,000 of wages for each qualified employee hired by the RC business, (3) that each State can allocate up to $12 million for "commercial revitalization expenditures" for businesses in a RC, and (4) that RC businesses can claim up to $35,000 in section 179 expensing for qualified RC property.

Impact

The NMTC is an investment credit. Thus investors, who are likely in higher income brackets, are the direct beneficiaries. Business owners are the direct beneficiaries of the RC tax incentives. Business owners, like investors, are also likely to fall in higher income brackets. Nevertheless, the tax incentives may likely encourage investment spending in economically distressed communities. The additional investment could indirectly benefit the workers and residents of these communities. A more direct means of providing assistance to individuals in distressed communities would be direct aid to individuals.

Rationale

The Renewal Community provisions were enacted by the Community Renewal Tax Relief Act of 2000 (P.L. 106-544). The tax incentives in the RC legislation are designed to lower the cost of capital and labor for RC businesses relative to non-RC businesses. Policymakers consider the incentives as a way to encourage investment in RC businesses and help lower the cost of doing business in Renewal Communities. P.L. 109-432 extended the RC coverage through 2008 and required that non-metropolitan counties receive a proportional allocation.

The NMTC was also enacted by the Community Renewal Tax Relief Act of 2000. The NMTC is designed to provide tax relief to investors in economically distressed communities through providing a more certain rate of return with fixed credit rates. The Gulf Opportunity Zone Act of 2005 (P.L. 109-135) targeted an additional $1 billion in NMTC's towards investment in areas affected by Hurricane Katrina. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) extended the NMTC through 2008 and Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the NMTC through 2009, both with $3.5 billion in allocation authority.

Assessment

The NMTC program is still relatively new, so an evaluation of the program's effectiveness is difficult. The CDFI Fund, which operates the NMTC program, reports that as of October 1, 2008, New Markets Tax Credit allocatees had raised over $12 billion in private equity to invest in low income communities, with over 81 percent of the funds going to severely distressed communities. The CDFI also reports that the businesses receiving funds are projected to develop or rehabilitate nearly 20 million square feet of commercial real estate, while generating over 37,000 construction jobs.

The relative size of the credit program, however, may limit its influence on economic growth and development in distressed communities. According to a 2002 Government Accountability Office (GAO) report, the potential new investment must be assessed against the fact that the potential target area includes approximately 35 percent of the U.S. population and 40 percent of the land area. In addition, the fixed credit rate, 5 percent for the first three years and 6 percent for the four final years, may not be enough to compensate investors for the underlying risk of the principal investment.

The capital gain exclusion for RC businesses may shift investment into the RC. Investors could invest more money in a RC business because the after-tax return is higher than similar investments in non-RC businesses. The higher after-tax return will, in theory, encourage more investment in RC businesses, perhaps at the expense of businesses just outside the RC. The employee tax credit for RC businesses may encourage hiring the workers that qualify under the program. The Federal tax credit should lower the per unit labor costs of the RC business and may lead to either more workers being hired or more hours worked. The relatively small size of the credit may limit the impact on overall employment in the Renewal Community.

RC businesses realize a tax savings for rehabilitation expenses immediately, rather than over time, potentially encouraging more renovation. The RC businesses could decide to renovate because the immediate tax savings increases the after-tax rate of return on those expenditures. In short, a tax savings today is worth more than an equal tax savings earned in the future. The accelerated depreciation incentive is similar to the rehabilitation tax benefit. The RC business realizes a tax saving because it can deduct the entire cost of the capital equipment (and receive the tax savings) immediately rather than in increments spread into the future. The accelerated depreciation should lower the cost of capital and encourage more capital investment by RC businesses.

Selected Bibliography

Armistead, P. Jefferson. "New Markets Tax Credits: Issues and Opportunities," *prepared for the Pratt Institute Center for Community and Environmental Development*, April 2005.

Cohen, Ann Burstein. "Community Renewal Tax Relief's Act's Incentives for Investors — Form over Substance?," *The Tax Adviser*, v. 32, no. 6 (June 2001), pp. 383-384.

— . "Renewal Communities," *The CPA Journal*, March 2004, pp. 46-53.

Lambert, Thomas E. And Paul A. Coomes. "An Evaluation of the Effectiveness of Louisville's Enterprise Zone," *Economic Development Quarterly,* v. 15, no. 2, (May 2001), pp. 168-180.

Marples, Donald J. "New Markets Tax Credit: An Introduction," Library of Congress, Congressional Research Service Report RL34402, 2008.

Myerson, Deborah L. "Capitalizing on the New Markets Tax Credit," *The Urban Land Institute Land Use Policy Forum Report*, September 2003.

Rubin, Julia Sass and Gregory M. Stankiewicz . "The New Markets Tax Credit Program: A Midcourse Assessment," *Federal Reserve Bank of San Francisco*, vol. 1, iss. 1, 2005.

Stoker, Robert P. and Michael J. Rich. "Lessons and Limits: Tax Incentives and Rebuilding the Gulf Coast After Katrina," *The Brookings Institution, Survey Series*, August 2006.

U.S. Congress, House Ways and Means Committee, Manager's Statement on Community Renewal Tax Relief Act of 2000, statement to accompany H.R. 5662 as incorporated in H.R. 4577, Dec. 15, 2001.

U.S. Congress, Joint Committee on Taxation. *Description of Present Law Regarding Tax Incentives for Renewal Communities and Other Economically Distressed Areas*, (JCX 40-02), May 20, 2002.

— . *Summary of Provisions Contained in the Community Renewal Tax Relief Act of 2000*, (JCX 112-00), December 15, 2000.

U.S. Department of Housing and Urban Development. *Tax Incentive Guide for Businesses in Renewal Communities, Empowerment Zones, and Enterprise Communities*, FY2002.

U.S. Department of the Treasury, Community Development Financial Institutions Fund (CDFI), *The Difference the CDFI Fund Makes*, [http://www.cdfifund.gov/impact_we_make/overview.asp], visited Oct. 29, 2008.

U.S. Government Accountability Office. *New Markets Tax Credit Appears to Increase Investment by Investors in Low-Income Communities, but Opportunities Exist to Better Monitor Compliance*, GAO-07-296, January 31,2007.

U.S. General Accounting Office. *New Markets Tax Credit Program: Progress Made in Implementation, But Further Actions Needed to Monitor Compliance*, GAO-04-326, January 30, 2004.

Community and Regional Development

DISASTER RELIEF PROVISIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.4	0.4	1.8
2009	2.7	1.1	3.8
2010	1.3	1.4	2.7
2011	0.9	0.9	1.8
2012	0.4	0.5	0.9

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Authorization

Section 1400L, section 151.

Description

This broad category of tax expenditures includes most tax provisions intended to help taxpayers recover from all manner of disasters. Included here are the tax expenditures created after the 9/11 attacks; Hurricanes Katrina, Rita, Wilma, and Ike; and the Midwest floods and disasters of 2008.

After 9/11, Congress designated a portion of lower Manhattan in New York as the "Liberty Zone" (the Zone). Specifically, the Zone "...is the area located on or south of Canal Street, East Broadway (east of its intersection with Canal Street), or Grand Street (east of its intersection with East Broadway) in the Borough of Manhattan in the City of New York, New York." The tax incentives included increased private-purpose tax-exempt bond capacity for New York (Liberty bonds and special one-time advance refunding). In 2004, P.L. 108-311 extended the Liberty bond program through January 1, 2010.

The Emergency Economic Stabilization Act of 2008 (EESA, P.L. 110-343) included tax relief for victims of the Midwestern disasters. The Midwestern disaster area tax relief provides tax relief for disaster victims in Arkansas, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, and Wisconsin. The provisions are applicable to the floods, severe storms, and tornadoes declared from May 20, 2008 through August 1, 2008.

The Hurricane Ike disaster relief allows Texas and Louisiana to allocate additional low income housing tax credits (LIHTC) for 2008, 2009, and 2010. The amount for Texas is $16 per person in the following counties: Brazoria, Chambers, Galveston, Jefferson, and Orange. In Louisiana, Calcasieu and Cameron Parishes can also allocate an additional $16 per person for LIHTC. There are also tax-exempt bond provisions that would allow the State to issue tax-exempt bonds to help the localities in the counties and parishes listed above with the construction and renovation of housing stock and public utility property. The interest income from private-activity bonds issued under this provision would not be subject to the alternative minimum tax (AMT).

National disaster relief for all disasters occurring between December 31, 2007 and January 1, 2010 was also included in EESA 2008. The EESA provision allows: (1) an additional itemized deduction to the extent they exceed $500 per casualty; (2) disaster victims to deduct immediately demolition and repair expenses as well as environmental remediation; and (3) five-year carryback of net operating losses attributable to disasters. EESA also allows the issuance of tax-exempt mortgage revenue bonds to finance low-interest loans to taxpayers in declared disaster areas whose principal residence was damaged by a disaster. Two additional provisions directed to business investment allow for special bonus depreciation and expensing of property.

EESA also extended the employer credit (the work opportunity tax credit, WOTC) of 40% for up to $6,000 of qualified wages for employees retained in the Katrina, Rita, and Wilma zone areas, during the period a business is inoperable through August 28, 2009.

Impact

Generally, the tax benefits will reduce the tax burden on individuals and businesses in areas affected by disasters. The benefits for business owners in the disaster areas will likely be passed along to their customers and investors. The impact on the disaster area will be positive as business investment shifts to the disaster area. Following is a more detailed discussion of the provisions.

Housing directed provisions. Before enactment of the temporary employer-provided housing for disaster victims, the housing benefit was included in income as compensation (and deducted by the employer) and was considered wages for purposes of Social Security and Medicare taxes and unemployment tax. For employees, the exclusion reduces income subject to tax. For employers, the credit is equivalent to a direct cost reduction. For example, for a firm in the 35 percent tax bracket, the credit reduces the cost of providing housing by $0.195 per dollar spent, the difference between a credit and a deduction ($1-$0.35 or $0.65 per dollar spent) on 30 percent of the cost.

As a result of the special exclusion, taxpayers receiving housing assistance pay less tax than other taxpayers with the same or smaller economic incomes. At the same time, however, they may be willing to accept lower wages so that part of the benefit is passed back to the employer as a reduction in employment costs. The individual exclusion also provides a reduction in the cost of hiring workers in that case: if the worker is in the 15 percent tax bracket, the employer could provide compensation only 85 percent as large as needed compared to the case where such compensation is taxable.

The mortgage revenue bond modifications will make low interest loans available to homeowners to finance the rehabilitation and rebuilding of disaster affected property. The lower interest rates may induce more residents to remain in disaster areas and rebuild. While short term advantages are clear, the long term impact of encouraging homeowners to remain in disaster stricken areas is less clear.

Business directed provisions. The expensing, bonus depreciation, and carryback provisions allow taxpayers to obtain the tax benefit earlier than would otherwise be the case. For example, at a seven percent interest rate, the value of taking a deduction currently is 40 percent greater than taking a deduction five years from the present. The value of this provision is greatest per dollar of cost or investment the more delayed the tax benefit. For taxpayers who hold property for a long period of time, for example, the deduction for the clean-up costs will not occur until far in the future when the property is sold. Bonus depreciation is more valuable for long-lived assets, such as buildings. The loss carryback provisions are particularly important for local business in the disaster area where businesses are less likely to be currently profitable. These provisions encourage firms to make investments and restore property in the disaster area, as well as providing financial relief for businesses with losses due to the Hurricane.

The work opportunity tax credit (WOTC) encourages and aids employers in keeping employees on the payroll who cannot perform their jobs because the business is not operating.

Forgiveness of debt reduces the taxes that would be immediately due when debt is forgiven. Individuals affected by a disaster may be relieved of a tax they do not have the cash to pay. These debts could be large relative to current income. To the extent the provision affects debt related to property, the benefit is more concentrated among higher income individuals, although other forms of debt may be involved as well.

Rationale

The "New York City Liberty Zone Tax Incentives" were created by the "Job Creation and Worker Assistance Act of 2002" (P.L. 107-147) after the September 11, 2001 terrorist attacks. The Liberty Zone tax incentives are designed to address the relatively severe economic shock that affected the lower Manhattan region.

The tax provisions enacted as part of the Katrina Emergency Tax Relief Act of 2005 (KETRA; P.L. 109-73) in September 2005 were intended to directly and indirectly assist individuals in recovering from Hurricane Katrina. Originally, the wage credit was limited to employers with fewer than 200 employees. The Gulf Opportunity Zone Act of 2005 (GOZA) extended the wage credit to areas affected by Hurricanes Rita and Wilma, and eliminated the employee cap. This latter action, in December 2005, also provided the expensing, bonus depreciation, and carry-back provisions. This act was more specifically directed at rebuilding the disaster area by providing targeted subsidies to business. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) extended the placed in service date for buildings, originally through 2008, through 2010. The GOZA increased rehabilitation credit for historic property in the GO zone was extended by EESA through August 28, 2009.

Assessment

The benefit of expanding the WOTC eases the tax burden on employers. The effectiveness of WOTC, however, may be limited by the relative cost and complexity of administrative compliance. For more on the WOTC, see the entry in this volume titled: "Work Opportunity Tax Credit." The accelerated depreciation provisions will lower the cost of capital but only through deferral of the tax that would have been due under the normal depreciation schedule. Businesses that use the bonus depreciation will pay less taxes today, but the tax burden in the future will be slightly higher as depreciation expenses are smaller than they would have otherwise been. The tax benefit, therefore, is the present value of the tax deferred. The accelerated depreciation may induce some firms to invest in new capital; however, the magnitude of the impact of the incentive is uncertain. For more on accelerated depreciation for business property, see the entry in this volume titled: "Expensing of Depreciable Business Property."

Generally, these geographic benefits induce investors to shift investment spending rather than generate new investment spending. Thus, the localized tax incentives redistribute tax revenue and investment from all federal taxpayers to taxpayers in the designated area. From a national perspective, the economic benefit of geographically based incentives is not clear. However, taxpayers in the designated areas are likely better off with the incentives.

There is relatively little evidence to determine the effectiveness of the housing tax provisions in increasing employment and business activity in the affected areas. The evidence based on previous studies of provisions targeted at poor areas does not indicate that tax incentives are very successful. However, experience in a low income area, usually of a city, may not provide sufficient evidence to gauge the effects on a much larger geographic area composed of both higher and lower income affected by a major disaster.

In general, special subsidies to industries and activities tend to lead to inefficient allocation of resources and the argument can be made that market forces should be relied upon to determine what rebuilding should take place. At the same time, one can make the case that all taxpayers should assist in recovery of an area affected by such a large scale disaster, as a part of national risk-spreading.

Selected Bibliography

Bram, Jason. "New York City's Economy Before and After September 11," *Federal Reserve Bank of New York: Current Issues in Economics and Finance*, February 2003.

Chernick, Howard, and Andrew F. Haughwout. "Tax Policy and the Fiscal Cost of Disasters: NY and 9/11," *National Tax Journal*, v. 59, September 2006, pp.561-578.

Glaeser, Edward L. and Jesse M. Shapiro. "Cities and Warfare: The Impact of Terrorism on Urban Form." *NBER Working Paper Series 8696,* National Bureau of Economic Research, December 2001.

Gravelle, Jane G. "Tax Incentives in the Aftermath of Hurricane Katrina," *Municipal Finance Journal*, v. 26, Fall 2005, pp. 1-13.

Internal Revenue Service, *Information for Taxpayers Affected by Hurricanes Katrina, Rita, and Wilma*, Publication 4492, January 1, 2006.

Lunder, Erika. *The Gulf Opportunity Zone Act of 2005*, Library of Congress, Congressional Research Service, Report RS22344, February 2006.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 2008.

Richardson, James A. "Katrina/Rita: The Ultimate Test for Tax Policy?" *National Tax Journal*, v. 59, September 2006, pp.551-560.

Stoker, Robert P. and Michael J. Rich. *Lessons and Limits: Tax Incentives and Rebuilding the Gulf Coast After Katrina, Metropolitan Policy Program*, Washington, DC: The Brookings Institution, August 2006.

U.S. Congress, Joint Committee on Taxation, *Technical Explanation of the Revenue Provisions of H.R. 4440, The "Gulf Opportunity Zone Act of 2005," as Passed by The House Of Representatives And The Senate*, JCX-88-05, December 16, 2005.

— , Joint Committee on Taxation. *Technical Explanation of the Job Creation and Worker Assistance Act of 2002*, (JCX 12-02), March 6, 2002.

— , Joint Committee on Taxation, *Technical Explanation of the Revenue Provisions of H.R. 3768, The Katrina Emergency Relief Act of 2005, As Passed by the House of Representatives and the Senate*, JCX-69-05, Washington, DC, September 21, 2005.

U.S. Government Accountability Office, *Tax Administration: Information is Not Available to Determine Whether $5 Billion in Liberty Zone Tax Benefits Will be Realized*. Report GAO-03-1102, October 2003.

Vigdor, Jacob. "The Economic Aftermath of Hurricane Katrina." *Journal of Economic Perspectives*. v. 22, Fall 2008, pp. 135-154.

Westly, Christopher, Robert P. Murphy, and William L. Anderson. "Institutions, Incentives, and Disaster Relief." *International Journal of Social Economics*, vol. 35, no. 7, 2008, pp. 501-511.

Wildasin, David. "Local Public Finance in the Aftermath of September 11." *Journal of Urban Economics,* v. 51 (March 2002), pp. 225-237.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT BONDS FOR PRIVATE AIRPORTS, DOCKS, AND MASS-COMMUTING FACILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.7	0.3	1.0
2009	0.7	0.3	1.0
2010	0.7	0.3	1.0
2011	0.8	0.3	1.1
2012	0.9	0.3	1.2

Authorization

Sections 103, 141, 142, and 146.

Description

Interest income on State and local bonds used to finance the construction of government-owned airports, docks, wharves, and mass-commuting facilities, such as bus depots and subway stations, is tax exempt. These airport, dock, and wharf bonds are classified as private-activity bonds rather than governmental bonds because a substantial portion of their benefits accrues to individuals or business rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Because private-activity mass commuting facility bonds are subject to the private-activity bond annual volume cap, they must compete for cap allocations with bond proposals for all other private activities subject to the volume cap. The cap is equal to the greater of $85 per capita or $262.095 million in 2008. The cap has been adjusted for inflation since 2003. Bonds

issued for airports, docks, and wharves are not, however, subject to the annual Federally imposed State volume cap on private-activity bonds. The cap is forgone because government ownership requirements restrict the ability of the State or local government to transfer the benefits of the tax exemption to a private operator of the facilities.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low-interest rates enable issuers to provide the services of airport, dock, and wharf facilities at lower cost. Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and users of the airport, dock, and wharf facilities, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Before 1968, State and local governments were allowed to issue tax-exempt bonds to finance privately owned airports, docks, and wharves without restriction. The Revenue and Expenditure Control Act of 1968 (RECA 1968) imposed tests that restricted the issuance of bonds for private purposes. However, the Act also provided a specific exception which allowed unrestricted issuance for airports, docks, and wharves, and mass commuting facilities.

The Deficit Reduction Act of 1984 allowed bonds for non-government-owned airports, docks, wharves, and mass-commuting facilities to be tax exempt, but required the bonds to be subject to a volume cap applied to several private activities. The volume cap did not apply if the facilities were "governmentally owned."

The Tax Reform Act of 1986 allowed tax exemption only if the facilities satisfied government ownership requirements, but excluded the bonds for airports, wharves, and docks from the private-activity bond volume cap. This Act also denied tax exemption for bonds used to finance related facilities such as hotels, retail facilities in excess of the size necessary to serve passengers and employees, and office facilities for nongovernment employees.

The Economic Recovery Tax Act of 1981 extended tax exemption to mass-commuting vehicles (bus, subway car, rail car, or similar equipment) that private owners leased to government-owned mass transit systems. This

provision allowed both the vehicle owner and the government transit system to benefit from the tax advantages of tax-exempt interest and accelerated depreciation allowances. The vehicle exemption expired on December 31, 1984.

Assessment

State and local governments tend to view these facilities as economic development tools. The desirability of allowing these bonds to be eligible for tax-exempt status hinges on one's view of whether the users of such facilities should pay the full cost, or whether sufficient social benefits exist to justify Federal taxpayer subsidy. Economic theory suggests that to the extent these facilities provide social benefits that extend beyond the boundaries of the State or local government, the facilities might be underprovided due to the reluctance of State and local taxpayers to finance benefits for nonresidents.

Even if a case can be made for a Federal subsidy due to underinvestment at the State and local level, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, those issued for airports, docks, and wharves increase the financing cost of bonds issued for other public capital. With a greater supply of public bonds, the interest rate on the bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds increases the assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Giesecke, James, Peter B. Dixon, and Maureen T. Rimmer. "Regional Macroeconomic Outcomes under Alternative Arrangements for the Financing of Public Infrastructure." Papers in Regional Science, v. 87, no. 1, March 2008.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

U.S. Congress, Congressional Budget Office. "Issues and Options in Infrastructure Financing," May 2008.

U.S. Congress, Congressional Budget Office. Statement of Donald B. Marron before the Subcommittee on Select Revenue Measures Committee on Ways and Means U.S. House of Representatives. "Economic Issues in the Use of Tax-Preferred Bond Financing," March 16, 2006.

U.S. Congress, Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT SEWAGE, WATER, AND HAZARDOUS WASTE FACILITIES BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.4	0.2	0.6
2009	0.4	0.2	0.6
2010	0.4	0.2	0.6
2011	0.5	0.2	0.7
2012	0.5	0.2	0.7

Authorization

Sections 103, 141, 142, and 146.

Description

Interest income from State and local bonds used to finance the construction of sewage facilities, facilities for the furnishing of water, and facilities for the disposal of hazardous waste is tax exempt.

Some of these bonds are classified as private-activity bonds rather than as governmental bonds because a substantial portion of their benefits accrues to individuals or business rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

The bonds classified as private activity for these facilities are subject to the State private-activity bond annual volume cap.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to finance the facilities at reduced interest rates.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and users of the sewage, water, and hazardous waste facilities, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Prior to 1968, no restriction was placed on the ability of State and local governments to issue tax-exempt bonds to finance sewage, water, and hazardous waste facilities. Although the Revenue and Expenditure Control Act of 1968 imposed tests that would have restricted issuance of these bonds, it provided a specific exception for sewage and water (allowing continued unrestricted issuance).

Water-furnishing facilities must be made available to the general public (including electric utility and other businesses), and must be either operated by a governmental unit or have their rates approved or established by a governmental unit. The hazardous waste exception was adopted by the Tax Reform Act of 1986. The portion of a hazardous waste facility that can be financed with tax-exempt bonds cannot exceed the portion of the facility to be used by entities other than the owner or operator of the facility. In other words, a hazardous waste producer cannot use tax-exempt bonds to finance a facility to treat its own wastes.

Assessment

Many observers suggest that sewage, water, and hazardous waste treatment facilities will be under-provided by State and local governments because the benefit of the facilities extends beyond State and local government boundaries. In addition, there are significant costs, real and perceived, associated with siting an unwanted hazardous waste facility. The federal subsidy through this tax expenditure may encourage increased investment as well as spread the cost to more potential beneficiaries, federal taxpayers.

Alternatively, subsidizing hazardous waste treatment facilities reduces the cost of producing waste if the subsidy is passed through to waste producers. When the cost of producing waste declines, then waste emitters may in turn

increase their waste output. Thus, subsidizing waste treatment facilities may actually increase waste production. Recognizing the potential effect of subsidizing private investment in waste treatment, Congress eliminated a general subsidy for private investment in waste and pollution control equipment in the Tax Reform Act of 1986.

Even if a subsidy for sewage, water, and hazardous waste facilities is considered appropriate, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, bonds for these facilities increase the financing cost of bonds issued for other public capital. With a greater supply of public bonds, the interest cost on the bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds increases the range of assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Fredriksson, Per G. "The Siting of Hazardous Waste Facilities in Federal Systems: The Political Economy of NIMBY [Not In My Back Yard]," *Environmental and Resource Economics* v. 15, no. 1 (January 2000), pp. 75-87.

Maguire, Steven. *Private Activity Bonds: An Analysis of State Use, 2001 to 2006.* Library of Congress, Congressional Research Service Report RL34159, April 2008

— . *Private Activity Bonds: An Introduction*. Library of Congress, Congressional Research Service Report RL31457, March 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638, March 2008.

U.S. Congress, Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

U.S. Department of Treasury, Internal Revenue Service. *Tax-Exempt Private Activity Bonds*, Publication 4078, June 2004.

Zimmerman, Dennis. *Environmental Infrastructure and the State-Local Sector: Should Tax-Exempt Bond Law Be Changed?* Library of Congress, Congressional Research Service Report 91-866 E. Washington, DC: December 16, 1991.

— . *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activities*. Washington, DC: The Urban Institute Press, 1991.

EXPENSING OF REDEVELOPMENT COSTS IN CERTAIN ENVIRONMENTALLY CONTAMINATED AREAS ("BROWNFIELDS")

Estimated Revenue Loss)

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	0.1	0.2
2009	0.1	0.1	0.2
2010	([1])	([1])	([1])
2011	-0.1	-0.1	-0.2
2012	-0.1	-0.2	-0.3

([1])Less than $50 million.

Authorization

Section 198, 280B, and 468, 1221(1), 1245, 1392(b)(4), and 1393(a)(9).

Description

Firms that undertake expenditures to control or abate hazardous substances in a qualified contaminated business property or site in certain targeted empowerment zones and enterprise communities are allowed to expense — deduct the costs against income in the year incurred — those expenditures that would otherwise be allocated to capital account. Upon the disposition of the property, the deductions are subject to recapture as ordinary income. Eligible expenses must be incurred before January 1, 2010. The deduction applies to both the regular and the alternative minimum tax.

A qualified contaminated site, or "brownfield," is generally defined as any property that 1) is held for use in a trade or business, and 2) on which there has been an actual or threatened release or disposal of certain hazardous substances as certified by the appropriate state environmental agency. Superfund sites — sites that are on the national priorities list under the

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 — do not qualify as brownfields.

Impact

Immediate expensing provides a tax subsidy for capital invested by businesses, in this case for capital to be used for environmental cleanup and community development. Frequently, the costs of cleaning up contaminated land and water in abandoned industrial or commercial sites are a major barrier to redevelopment of that site and of the community in general. By expensing rather than capitalizing these costs, taxes on the income generated by the capital expenditures are effectively set to zero. This should provide a financial incentive to businesses and encourage them to invest in the cleanup and redevelopment of "brownfields" — abandoned old industrial sites and dumps, including properties owned by the federal and subnational government, that could and would be cleaned up and redeveloped except for the costs and complexities of the environmental contamination.

The provision broadens target areas in distressed urban and rural communities that can attract the capital and enterprises needed to rebuild and redevelop polluted sites. The tax subsidy is thus primarily viewed as an instrument of community development, to develop and revitalize urban and rural areas depressed due to environmental contamination. According to the Environmental Protection Agency, there are thousands of such sites (30,000 by some estimates) in the United States.

Rationale

Section 198 was added by the Taxpayer Relief Act of 1997 (P.L. 105-34). Its purpose is threefold: 1) As an economic development policy, its purpose is to encourage the redevelopment and revitalization of depressed communities and properties abandoned due to hazardous waste pollution; 2) as an environmental policy, expensing of environmental remediation costs provides a financial incentive to clean up contaminated waste sites; and 3) as tax policy, expensing of environmental remediation costs establishes clear and consistent rules, and reduces the uncertainty that existed prior to the law's enactment, regarding the appropriate tax treatment of such expenditures.

The provision was originally to expire at the end of 2000, but was extended to the end of 2001 by the Tax Relief Extension Act of 1999 (P.L. 106-170). It was extended again by the Community Renewal Tax Relief Act of 2000 (P.L. 106-554). The provision expired again, this time on January 1, 2003, but was retroactively extended through December 31, 2005, by the Working Families Tax Relief Act of 2004 (P.L. 108-311). The Tax Increase Prevention and Relief Act (P.L. 109-222) extended it through December 31,

2006. It also expanded the list of hazardous substances to include any petroleum product. A provision to extend expensing of brownfield costs by either one or two years is part of so-called "extender" legislation, but these bills have not moved in Congress partly because of concerns over other controversial tax measures (such as estate tax cuts). The Tax Relief and Health Care Act of 2006 (P.L. 109-432) in December 2006 extended the provision through 2007. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) extended the provision through 2009.

Assessment

Section 198 specifically treats environmental remediation expenditures, which would otherwise be capitalized, as deductible in the year incurred. Such expenditures are generally recognized to be capital costs, which, according to standard economic principles, should be recovered over the income producing life of the underlying asset. As a capital subsidy, however, expensing is inefficient because it makes investment decisions based on tax considerations rather than inherent economic considerations.

As a community development policy, the effectiveness of the tax subsidy has been questioned, as many view the main disincentive to development of brownfield sites not the costs but rather the potential liability under current environmental regulation. That is to say the main barrier to development appears to be regulatory rather than financial.

Barring such regulatory disincentives, the market system ordinarily creates its own incentives to develop depressed areas, as part of the normal economic cycle of growth, decay, and redevelopment. As an environmental policy, this type of capital subsidy is also questionable on efficiency grounds. Many economists believe that expensing is a costly and inefficient way to achieve environmental goals, and that the external costs resulting from environmental pollution are more efficiently addressed by either pollution or waste taxes or tradeable permits.

Selected Bibliography

Carroll, Deborah A., and Robert J. Eger III. "Brownfields, Crime, and Tax Increment Financing." *American Review of Public Administration*. December 1, 2006. v. 36. pp. 455-477.

Greenberg, Michael R., and Justin Hollander. "The Environmental Protection Agency's Brownfields Pilot Program." *American Journal of Public Health.* February 2006. v. 96. pp. 277-282.

Jackson, Pamela J. and Jennifer Teefy, *Temporary Tax Provisions ("Extenders") Expired in 2007.* U.S. Library of Congress. Congressional Research Service. Report RS32367, 2008.

Longo, Alberto, and Anna Alberini. "What Are the Effects of Contamination Risks on Commercial and Industrial Properties? Evidence from Baltimore, Maryland." *Journal of Environmental Planning and Management.* September 2006. v.49. pp. 713-751.

Northeast-Midwest Institute. National Association of Local Government Environmental Professionals. *Unlocking Brownfields: Keys to Community Revitalization.* October 2004.

Paull, Evans, "The Environmental and Economic Implications of Brownsfields Redevelopment, Northeast Midwest Institute, July 2008: [http://www.nemw.org/EnvironEconImpactsBFRedev.pdf].

Reisch, Mark. *Superfund and the Brownfields Issue*. Library of Congress, Congressional Research Service Report 97-731 ENR, Washington, DC, 2001.

— . *Brownfield Issues in the 110th Congress.* U.S. Library of Congress. Congressional Research Service. Report RS22575, 2008.

— . *The Section 198 Brownfields Tax Incentive: 2007 CRS Survey.* U.S. Library of Congress. Congressional Research Service. CRS Report RS 21599, 2007.

Segal, Mark A. "Environmental Cleanup Expenditures: An Inquiry Into Their Proper Tax Treatment." *Oil & Gas Tax Quarterly*, v. 42, 1994: 715-729.

Shi, J. Stephen, and Susan H. Cooper. "Tax Treatment of Environmental Costs." *Banking Law Journal v*. 112, February. 1995, pp. 165-170.

Sims, Theodore S. "Environmental 'Remediation' Expenses and a Natural Interpretation of the Capitalization Requirement. *National Tax Journal,* v. 47, September 1994, pp. 703-718.

Sterner, Thomas. *Policy Instruments for Environmental and Natural Resource Management.* Resources for the Future, Washington, 2003.

U.S. Treasury Department. *Treasury News: Statement of Treasury Secretary Robert E. Rubin on a New Brownfields Tax Incentive.* March 11, 1996. Washington.

Weld, Leonard G., and Charles E. Price. "Questions About the Deduction of Environmental Cleanup Costs After Revenue Ruling 94-38." *Taxes*, v. 73, May 1995, pp. 227-233.

PARENTAL PERSONAL EXEMPTION FOR STUDENTS AGE 19-23

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.3	([1])	1.3
2009	0.4	([1])	0.4
2010	([1])	([1])	([1])
2011	0.3	([1])	0.3
2012	0.4	([1])	0.4

([1])Less than $50 million.

Authorization

Sections 151, 152.

Description

Taxpayers may claim dependency exemptions for children 19 through 23 years of age who are full-time students at least five months, possibly non-consecutive, during the year, even if the children have gross income in excess of the personal exemption amount ($3,500 in 2008) that normally would be a disqualifying factor. Other standard dependency tests must be met though, including the taxpayer's provision of one-half of the dependents' support. The dependents cannot claim personal exemptions on their own returns, however, and their standard deduction may be lower. In 2008, with some exceptions, the standard deduction for dependents is equal to the greater of $900 or their earned income plus $300 provided the sum does not exceed the standard deduction amount of $5,450 for single taxpayers. A scholarship or similar income that is not excludable from the dependent's income is considered earned income for standard deduction

purposes. Most of the dollar amounts listed in this entry change annually due to indexation for inflation.

Impact

The benefit to taxpayers arises for two reasons. First, the total sum of deductions and exemptions claimed by the parents and the students may be larger than without this provision. Second, parents are often subject to a higher marginal tax rate than their children attending college. Thus, a given amount of deductions and exemptions reduces parents' tax liability by a larger amount than students'.

Parents may lose some or all of the student dependency exemption if their adjusted gross income is greater than the inflation adjusted threshold for phasing out personal exemptions. In 2008, the threshold amounts begin at: $239,950 for joint returns, $159,950 for single returns, or $199,900 for heads of household. The taxpayer that can be claimed as a dependent must file as such, regardless of whether he actually is claimed as a dependent on someone else's return. In these circumstances the provision might actually increase the aggregate liability of parents and students, although sometimes taxpayers may avoid it.

Rationale

With the codification in 1954, the Internal Revenue Code first allowed parents to claim dependency exemptions for their children regardless of the children's gross income, provided they were less than 19 years old or were full-time students for at least 5 months. Under prior law, such exemptions could not be claimed for any child whose gross income exceeded $600 (the amount of the personal exemption at the time). Committee reports for the legislation noted that the prior rule was a hardship for parents with children in school and a disincentive to work for the children.

Under the 1954 Code, dependents whose exemptions could be claimed by their parents could also claim personal exemptions on their own returns. The Tax Reform Act of 1986 disallowed double exemptions, limiting claims just to the parents. It did allow a partial standard deduction for students equal to the greater of $500 or earned income up to the generally applicable standard deduction amount. As a result, students with no earned income were able to shelter up to $500 in unearned income from taxation. The $500 is indexed for inflation as is the amount of the standard deduction.

The Technical and Miscellaneous Revenue Act of 1988 restricted the student dependency exemption to children under the age of 24. Students who are older than 23 can be claimed as dependents only if their gross income is less than the personal exemption amount.

The Taxpayer Relief Act of 1997 raised students' standard deduction to the greater of $700 ($500 adjusted for inflation) or the total of earned income plus $250 in unearned income provided the total did not exceed the full standard deduction. This change, effective beginning in 1998, enables students with earned income greater than $700 but less than the standard deduction amount and with little unearned income to shelter their unearned income from taxation and to no longer file a separate tax return (unless they must do so to claim a refund of withheld tax). The limit on unearned income is adjusted annually for inflation.

The Working Family Tax Relief Act of 2004 (P.L. 108-311) revised the definition of a child for tax purposes, beginning with tax year 2005. Specifically, the law replaced the definition of a dependent for the personal exemption with requirements (or tests) that define new categories of dependents. Under this definition, a child is a qualifying child of the taxpayer if the child satisfies three tests: (1) the child has not yet attained a specified age; (2) the child has a specified relationship to the taxpayer; and (3) the child has the same principal place of abode as the taxpayer for more than half the taxable year. Fostering Connections to Success and Increasing Adoptions Act of 2008 (P.L. 110-351) made additional changes to the definition of a child.

Assessment

The student dependency exemption was created before the development of broad-based federal student aid programs, and some of its effects might be questioned in light of their objectives. The exemption principally benefits families with higher incomes, and the tax savings are not related to the cost of education. In contrast, most federal student aid is awarded according to financial need formulas that reflect both available family resources and educational cost.

Nonetheless, the original rationale for the student dependency exemption remains valid. If the exemption did not exist, as was the case before 1954, students who earned more than the personal exemption amount would cause their parents to lose a dependency exemption worth hundreds of dollars, depending on the latter's tax bracket. Unless they would earn a lot more money, students who knew of this consequence might stop working at the point their earnings reached the personal exemption amount.

Selected Bibliography

Bittker, Boris I. "Federal Income Taxation and the Family," 27 *Stanford Law Review* 1389, esp. pp. 1444-1456 (1975).

Jackson, Pamela J. *Standard Deduction and Personal Dependency Amounts for Children 14 and Over or Students*, Library of Congress,

Congressional Research Service Report RS20072, (Washington, DC, June 28, 2006).

Scott, Christine. *Tax Benefits for Families: Changes in the Definition of a Child*, Library of Congress, Congressional Research Service Report RS22016, (Washington, DC, March 10, 2006).

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986* (H.R. 3838, 99th Congress; Public Law 99-514), (Washington, DC, May 4, 1987), pp. 22-24.

DEDUCTION FOR CLASSROOM EXPENSES OF ELEMENTARY AND SECONDARY SCHOOL EDUCATORS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	([1])	0.2
2009	-	-	-
2010	-	-	-
2011	-	-	-
2012	-	-	-

([1]) Positive tax expenditure less than $50 million.

Authorization

Section 62.

Description

An eligible employee of a public (including charter) and private elementary or secondary school may claim an above-the-line deduction for certain unreimbursed expenses. An eligible educator is defined to be an individual who, with respect to any tax year, is an elementary or secondary school teacher, instructor, counselor, principal, or aide in a school for a minimum of 900 hours in a school year. The expenses must be associated with the purchase of the following items for use by the educator in the classroom: books; supplies (other than nonathletic supplies for health or physical education courses); computer equipment, software, and services; other equipment; and supplementary materials. The taxpayer may deduct up to $250 spent on these items.

The amount of deductible classroom expenses is not limited by the taxpayer's income. Educators must reduce the total amount they expend on

eligible items by any interest from an Education Savings Bond or distribution from a Qualified Tuition (Section 529) Program or Coverdell Education Savings Account that was excluded from income. In other words, if educators or members of their tax filing units utilize earnings from these savings vehicles to pay tuition and other qualified educational expenses, only those classroom expenses that exceed the value of these income exclusions are deductible.

Impact

Educators, as an occupation, are actively involved in improving the human capital of the nation. The availability of the classroom expense deduction may encourage educators who already are doing so to continue to use their own money to make purchases to enhance their students' educational experience, and potentially encourages other educators to start doing the same. Alternatively, the deduction may be a windfall to educators. As noted in the table below, more than half of the deductions are taken by tax filing units with adjusted gross incomes of at least $75,000.

Distribution by Income Class of Classroom Expense Deduction at 2006 Income Levels

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.9
$10 to $20	3.1
$20 to $30	4.4
$30 to $40	8.8
$40 to $50	8.3
$50 to $75	22.3
$75 to $100	22.4
$100 to $200	26.6
$200 and over	3.2

Source: IRS *Statistics of Income.* This is not a distribution of the tax expenditures, but of the deduction; it is classified by adjusted gross income.

Rationale

The classroom deduction was enacted on a temporary basis as part of the Job Creation and Worker Assistance Act of 2002, and reauthorized through December 31, 2009 as part of the Emergency Economic Stabilization Act of 2008 at Division C. Prior to the classroom deduction's enactment, the only

tax benefit available to educators for trade/business expenses was the permanent deduction at Section 162 of the Code. That deduction remains available to educators but in order to take it, the total of their miscellaneous itemized deductions must exceed 2% of adjusted gross income. An above-the-line deduction targeted at educators was considered socially desirable because teachers voluntarily augment school funds by purchasing items thought to enhance the quality of children's education.

Assessment

Taxpayers with teachers in their filing units who make trade/business purchases in excess of $250 or who have other miscellaneous itemized deductions may now have to compute tax liability twice — under Code Sections 62 and 162 — to determine which provides the greater savings. Taxpayers also must now consider how the educator expense deduction interacts with other tax provisions. The temporary above-the-line deduction means, for example, that higher income families with eligible educators may not have to subject classroom expenditures of up to $250 to the 3% limit on itemized deductions. (Higher income taxpayers must reduce total allowable itemized deductions by 3% of their income in excess of an inflation-adjusted threshold.) By lowering adjusted gross income, the classroom expense deduction also allows taxpayers to claim more of those deductions subject to an income floor (e.g., medical expenses).

In addition to increasing complexity, the classroom expense deduction treats educators differently than others whose business-related expenses are subject to the 2% floor on miscellaneous itemized deductions and the 3% limit on total itemized deductions. Further, the above-the-line deduction is allowed against the alternate minimum tax while the Section 162 deduction is not.

Selected Bibliography

Levine, Linda. *The Tax Deduction for Classroom Expenses of Elementary and Secondary School Teachers*. Congressional Research Service Report RS21682. Washington, DC: updated October 3, 2008.

Joint Committee on Taxation. *Description of Revenue Provisions Contained in the President's Fiscal Year 2008 Budget Proposal*. Committee Print JCS-2-07. Washington, DC: Government Printing Office, March 2007.

TAX CREDITS FOR TUITION FOR POST-SECONDARY EDUCATION

Hope Scholarship Credit

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.7	-	2.7
2009	1.8	-	1.8
2010	2.0	-	2.0
2011	2.6	-	2.6
2012	2.7	-	2.7

Lifetime Learning Credit

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.9	-	1.9
2009	1.2	-	1.2
2010	2.0	-	2.0
2011	2.8	-	2.8
2012	2.9	-	2.9

Authorization

Section 25A.

Description

A Hope Scholarship Credit can be claimed for each eligible student in a family (including the taxpayer, the spouse, or their dependents) for two taxable years for qualified expenses incurred while attending an eligible postsecondary education program, provided the student has not completed the first two years of undergraduate education. An eligible student is one enrolled on at least a half-time basis for at least one academic period during the tax year in a program leading to a degree, certificate, or credential at an institution eligible to participate in U.S. Department of Education student aid programs; these include most accredited public, private, and proprietary postsecondary institutions. The per student credit is equal to 100% of the first $1,100 of qualified tuition and fees and 50% of the next $1,100. The maximum credit is indexed for inflation. Tuition and fees financed with scholarships, Pell Grants, veterans' education assistance, and other income not included in gross income for tax purposes (with the exception of gifts and inheritances) are not qualified expenses.

The Lifetime Learning Credit provides a 20% credit per return for the first $10,000 of qualified tuition and fees that taxpayers pay for themselves, their spouses, or their dependents. The credit is available for those enrolled in one or more courses of undergraduate or graduate instruction at an eligible institution to acquire or improve job skills. There is no limit on the number of years for which the credit may be claimed.

Both credits are phased out for single taxpayers with modified adjusted gross income between $47,000 and $57,000 ($94,000 and $114,000 for joint return taxpayers). The income thresholds are indexed to inflation. Neither credit is refundable. Both cannot be claimed for the same student in the same tax year. Taxpayers claiming a credit cannot concurrently take the temporary deduction for qualified higher education expenses.

Impact

The cost of investing in postsecondary education is reduced for those recipients whose marginal (i.e., last) investment dollar is affected by these credits. Other things equal, these individuals will either increase the amount they invest or participate when they otherwise would not. However, some of the federal revenue loss will be received by individuals whose investment decisions are not altered by the credits.

As shown in the table below, the ceilings limit the benefit available to higher income individuals. The lack of refundability limits the benefit available to very low income individuals.

Distribution by Income Class of the Tax Expenditure for Education Tax Credits, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	2.8
$20 to $30	10.4
$30 to $40	12.5
$40 to $50	12.4
$50 to $75	8.6
$75 to $100	28.5
$100 to $200	24.7
$200 and over	0.0

Rationale

These credits were enacted in the Taxpayer Relief Act of 1997, along with a number of other higher education tax benefits. Their intent is to make postsecondary education more affordable for middle-income families and students who might not qualify for much need-based federal student aid.

Assessment

A federal subsidy of higher education has three potential economic justifications: a capital market failure; external benefits; and nonneutral federal income tax treatment of physical and human capital. Subsidies that correct these problems are said to provide taxpayers with "social benefits."

Many students find themselves unable to finance their postsecondary education from earnings and personal or family savings. Student mobility and a lack of property to pledge as loan collateral would require commercial lenders to charge high interest rates on education loans in light of the high risk of default. As a result, students often find themselves unable to afford loans from the financial sector. This financial constraint bears more heavily on lower income groups than on higher income groups and accordingly, leads to inequality of opportunity to acquire a postsecondary education. It also is an inefficient allocation of resources because these students, on average, might earn a higher rate of return on loans for education than the financial sector could earn on alternative loans.

This "failure" of the capital markets is attributable to the legal restriction against pledging an individual's future labor supply as loan collateral, that is, against indentured servitude. Since modern society rejects this practice, the federal government has strived to correct the market failure by providing a guarantee to absorb most of the financial sector's default risk associated with postsecondary loans to students. This financial support is provided through the Federal Family Education Loan Program and the Direct Loan Program. (See the entry "Exclusion of Interest on State and Local Government Student Loan Bonds" for more information.) The guarantee is an entitlement and equalizes the financing cost for some portion of most students' education investment. When combined with Pell Grants for lower income students, it appears that at least some portion of the capital market failure has been corrected and inequality of opportunity has been diminished.

Some benefits from postsecondary education may accrue not to the individual being educated, but rather to the members of society at large. As these external benefits are not valued by individuals considering educational purchases, they invest less than is optimal for society (even assuming no capital market imperfections). External benefits are variously described as taking the form of increased productivity and better citizenship (for example, greater likelihood of participating in elections).

Potential students induced to enroll in higher education by the Hope Scholarship and Lifetime Learning credits cause investment in education to increase. The overall effectiveness of the tax credits depends upon whether the cost of the marginal investment dollar of those already investing in higher education is reduced, however. It is clear from the structure of these tax credits that tuition and fee payments will exceed qualified tuition and fees for a large number of credit-eligible students, and as a result, they will not experience a price effect (e.g., the Hope credit will not reduce by 50% the last dollar these students invest in postsecondary education). Although their investment decision is unaffected by the credits, these students can claim them (i.e., reap a "windfall gain") but federal taxpayers get no offsetting social benefits in the form of an increased quantity of investment.

Selected Bibliography

Burman, Leonard E. with Elaine Maag, Peter Orszag, Jeffrey Rohaly, and John O'Hare. *The Distributional Consequences of Federal Assistance for Higher Education: The Intersection of Tax and Spending Programs*, The Urban Institute, Discussion Paper No. 26. Washington, DC: August 2005.

Dynarski, Susan. *Hope for Whom? Financial Aid for the Middle Class and Its Impact on College Attendance*. National Bureau of Economic Research, Working Paper 7756. Cambridge, MA: June 2000.

Hoblitzell, Barbara A. and Tiffany L. Smith. *Hope Works: Student Use of Education Tax Credits*. Indianapolis, IN: Lumina Foundation for Education Inc., November 2001.

Jackson, Pamela J. *Higher Education Tax Credits: An Economic Analysis*. Congressional Research Service Report RL32507. Washington, DC: updated April 29, 2008.

Levine, Linda. *The Benefits of Education*. Congressional Research Service Report RL33238. Washington, DC: December 29, 2005.

Levine, Linda and Charmaine Mercer. *Higher Education Tax Credits and Deduction: An Overview of the Benefits and Their Relationship to Traditional Student Aid*. Congressional Research Service Report RL31129. Washington, DC: updated January 8, 2008.

Long, Bridget Terry. *The Impact of Federal Tax Credits for Higher Education Expenses*. National Bureau of Economic Research, Working Paper 9553. Cambridge, MA: March 2003.

Wolanin, Thomas R. *Rhetoric and Reality: Effects and Consequences of the HOPE Scholarship*. Washington, DC: Institute for Higher Education Policy, Working Paper, April 2001.

Zimmerman, Dennis. "Education Tax Credits," in Joseph J. Cordes with Robert D. Ebel and Jane G. Gravelle, *Encyclopedia of Taxation and Tax Policy*, Washington, DC: Urban Institute, 2005.

DEDUCTION FOR INTEREST ON STUDENT LOANS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.8	-	0.8
2009	0.9	-	0.9
2010	1.0	-	1.0
2011	0.5	-	0.5
2012	0.4	-	0.4

Authorization

Section 221.

Description

Taxpayers may deduct interest paid on qualified education loans in determining their adjusted gross income. The deduction, which is limited to $2,500 annually, is not restricted to itemizers. Taxpayers are not eligible for the deduction if they can be claimed as a dependent by another taxpayer. Between 2002 and 2010, the deduction is not restricted to interest paid within the first 60 months during which interest payments are required and the phase-out income thresholds are indexed for inflation. Allowable deductions are phased out for taxpayers with modified adjusted gross income between $55,000 and $70,000 on individual returns and between $110,000 and $140,000 on joint returns. A sunset provision in the Economic Growth and Tax Relief Reconciliation Act of 2001 will cause the deduction to revert to its pre-2002 structure after December 31, 2010, absent further congressional action.

Qualified education loans are indebtedness incurred solely to pay qualified higher education expenses of taxpayers, their spouse, or their dependents who were at the time the debt was incurred students enrolled on at least a

half-time basis in a program leading to a degree, certificate, or credential at an institution eligible to participate in U.S. Department of Education student aid programs; these include most accredited public, private, and proprietary postsecondary institutions. Other eligible institutions are hospitals and health care facilities that conduct internship or residency programs leading to a certificate or degree. Qualified higher education expenses generally equal the cost of attendance (e.g., tuition, fees, books, equipment, room and board, and transportation) minus scholarships and other education payments excluded from income taxes. Refinancings are considered to be qualified loans, but loans from related parties are not.

Impact

The deduction benefits taxpayers according to their marginal tax rate (see Appendix A). Most education debt is incurred by students, who generally have low tax rates immediately after they leave school and begin loan repayment. However, some debt is incurred by parents who are in higher tax brackets.

The cap on the amount of debt that can be deducted annually limits the tax benefit's impact for those who have large loans. The income ceilings limit the benefit's availability to higher income individuals, as shown in the table below.

Distribution by Income Class of the Tax Expenditure for the Student Loan Deduction, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.1
$10 to $20	1.6
$20 to $30	4.1
$30 to $40	7.6
$40 to $50	10.7
$50 to $75	26.5
$75 to $100	15.7
$100 to $200	33.7
$200 and over	0.0

Rationale

The interest deduction for qualified education loans was authorized by the Taxpayer Relief Act of 1997 as one of a number of benefits intended to make postsecondary education more affordable for middle-income families who are unlikely to qualify for much need-based federal student aid. The interest deduction is seen as a way to help taxpayers repay education loan debt, which has risen substantially in recent years.

Assessment

The tax deduction can be justified both as a way of encouraging persons to undertake additional education and as a means of easing repayment burdens when graduates begin full-time employment. Whether the deduction will affect enrollment decisions is unknown; it might only change the way families finance college costs. The deduction may allow some graduates to accept public service jobs that pay low salaries, although their tax savings would not be large. The deduction has been criticized for providing a subsidy to all borrowers (aside from those with higher income), even those with little debt, and for doing little to help borrowers who have large loans. It is unlikely to reduce loan defaults, which generally are related to low income and unemployment.

Selected Bibliography

Burman, Leonard E. with Elaine Maag, Peter Orszag, Jeffrey Rohaly, and John O'Hare. *The Distributional Consequences of Federal Assistance for Higher Education: The Intersection of Tax and Spending Programs*, The Urban Institute, Discussion Paper No. 26. Washington, DC: August 2005.

Choy, Susan P. and Xiaojie Li. *Debt Burden: A Comparison of 1992-93 and 1999-2000 Bachelor's Degree Recipients a Year After Graduating.* U.S. Department of Education, National Center for Education Statistics, NCES 2005-170. Washington, DC: July 7, 2005.

Hanushek, Eric A. with Charles Ka Yui Leung and Kuzey Yilmaz. *Borrowing Constraints, College Aid, and Intergenerational Mobility*. National Bureau of Economic Research, Working Paper 10711. Cambridge, MA: August 2004.

Jackson, Pamela J. *An Overview of Tax Benefits for Higher Education Expenses*. Congressional Research Service Report RL32554. Washington, DC: updated January 22, 2008.

Levine, Linda. *Education Tax Benefits: Are They Permanent or Temporary?* Congressional Research Service Report RS21870. Washington, DC: updated October 3, 2008.

Project on Student Debt. *Addressing Student Loan Repayment Burdens*. Washington, DC: February 2006.

Rothstein, Jesse and Cecilia Elena Rouse. *Constrained After College: Student Loans and Early Career Occupational Choices*. National Bureau of Economic Research, Working Paper 13117. Cambridge, MA: May 2007.

State PIRGs' Higher Education Project. *Paying Back, Not Giving Back: Student Debt's Negative Impact on Public Service Career Opportunities*. Washington, DC: April 2006.

EXCLUSION OF EARNINGS OF COVERDELL EDUCATIONAL SAVINGS ACCOUNTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	-	0.1
2009	0.1	-	0.1
2010	0.1	-	0.1
2011	0.2	-	0.2
2012	0.2	-	0.2

Authorization

Section 530.

Description

Coverdell Education Savings Accounts (ESAs), formerly known as "Education IRAs," are trusts or custodial accounts created solely for the purpose of paying qualified elementary, secondary, and postsecondary education expenses of designated beneficiaries. The contribution limit was raised from $500 annually per beneficiary to $2,000 effective from 2002 through 2010. It is phased-out for single taxpayers with modified adjusted gross income between $95,000 and $110,000 ($190,000 and $220,000 for joint return taxpayers) annually during the 9-year period. The income limits are not adjusted for inflation and will revert to $95,000 and $150,000, respectively, after December 31, 2010. Corporations, tax-exempt organizations, or lower income individuals can contribute the maximum annual amount to accounts of children in families whose income falls in the phase-out range.

A contributor may fund multiple accounts for the same beneficiary, and a student may be the designated beneficiary of multiple accounts. A 6% tax

is imposed if total contributions exceed the annual per-beneficiary limit. Funds withdrawn from one Coverdell ESA in a 12-month period and rolled over to another ESA on behalf of the same beneficiary or certain of their family members are excluded from the annual contribution limit and are not taxable.

Contributions may be made until beneficiaries reach age 18, although they may continue beyond that age for special needs beneficiaries. Similarly, with the exception of special needs beneficiaries, account balances typically must be totally distributed when beneficiaries attain age 30. Contributions are not deductible, but account earnings grow on a tax-deferred basis. Beginning in 2002, a contribution may be made to an ESA in the same year that a contribution is made to a Qualified Tuition Program for the same beneficiary.

Distributions are excluded from gross income of the beneficiary if used for tuition, fees, books, supplies, and equipment required for enrollment or attendance; contributions to Qualified Tuition Programs; special needs services; and room and board expenses for students enrolled on at least a half-time basis at eligible institutions of higher education. Distributions also are not taxed if they are used, from 2002 through 2010, toward the following expenses of beneficiaries pursuing elementary and secondary (K-12) education: tuition, fees, books, supplies, and other equipment incurred in connection with enrollment or attendance; academic tutoring; special needs services; room and board, uniforms, transportation, and supplementary items or services required or provided by the school; and computer software, hardware, or services if used by the beneficiary and the beneficiary's family during any years the beneficiary is in school.

Eligible postsecondary institutions are those eligible to participate in U.S. Department of Education student aid programs; these include most accredited public, private, and proprietary postsecondary institutions. From 2002 through 2010, eligible institutions have been expanded to public and private K-12 schools, either secular or religiously affiliated; they include homeschools in some States.

Distributions are taxed to the beneficiary under section 72 annuity rules: thus, each distribution is treated as consisting of principal, which is not taxed, and earnings, some of which may be taxed depending on the amount of qualified education expenses. Distributions included in gross income are subject to a 10% penalty tax, with some exceptions. After 2001, beneficiaries can exclude from gross income distributions made in the same year that either the Hope Credit or the Lifetime Learning Credit is claimed (although not for the same expenses). This and other previously mentioned changes to the Coverdell ESA that went into effect in 2002 are set to expire after December 31, 2010 absent further congressional action.

Impact

Both the exclusion from gross income of account earnings withdrawn to pay for qualified expenses and the deferral of taxes on accumulating earnings confers benefits to tax filing units according to their marginal tax rate (see Appendix A). These benefits are most likely to accrue to higher income families that have the means to save on a regular basis.

Tax benefits from Coverdell ESAs might be offset by reductions in federal student aid, much of which is awarded to students based on their financial need. For most aid applicants, the impact is felt to the extent that balances in Coverdell ESAs (assets) and withdrawals from them (income) are expected to be contributed toward postsecondary education expenses under the traditional federal student aid system: a greater expected family contribution (EFC) can lead to reduced financial need and decreased eligibility for federal student aid. The Department of Education has not provided aid applicants with clear and timely information on whose assets and income the Coverdell ESAs are — the student or the parent — a difference which greatly affects the EFC. Congress, in amendments to the Higher Education Act of 1965 included in the Deficit Reduction Act of 2005 and the College Cost Reduction and Access Act of 2007, attempted to clarify the confusion that surrounds the need-analysis treatment of the Coverdell ESAs.

Rationale

Tax-favored saving for higher education expenses was authorized by the Taxpayer Relief Act of 1997 as one of a number of tax benefits for postsecondary education. These benefits reflect congressional concern that families are having increasing difficulty paying for college. They also reflect an intention to subsidize middle-income families that otherwise do not qualify for much need-based federal student aid. The Economic Growth and Tax Relief Reconciliation Act of 2001 expanded eligible expenses to those incurred in connection with enrollment in public and private K-12 schools. It was intended, in part, to encourage families to exercise school choice (i.e., attend alternatives to the traditional public school).

Assessment

The tax exclusion could be justified both as a way of encouraging families to use their own resources for college expenses and as a means of easing their financing burdens. Families that have the wherewithal to save are more likely to benefit. Whether families will save additional sums might be doubted. Tax benefits for Coverdell ESAs are not related to the student's cost of attendance or other family resources, as is most federal student aid for higher education.

Higher-income families also are more likely than lower-income families to establish accounts for their children's K-12 education expenses. The amount of the tax benefit, particularly if the maximum contribution to an account is not made each year, is probably too small to affect a family's decision about whether to send their children to public or private school.

Selected Bibliography

Davis, Albert J. "Choice Complexity in Tax Benefits for Higher Education," *National Tax Journal*, v. 55, no. 3 (September 2002). pp. 509-530.

Dynarksi, Susan M. *Who Benefits from the Education Savings Incentives? Income, Educational Expectations, and the Value of the 529 and Coverdell*. National Bureau of Economic Research, Working Paper 10470. Cambridge, MA: May 2004.

Investment Company Institute. *Profile of Households Saving for College*. Washington, DC: Fall 2003.

Levine, Linda. *Education Tax Benefits: Are They Permanent or Temporary?* Congressional Research Service Report RS21870. Washington, DC: updated October 3, 2008.

Levine, Linda and Charmaine Mercer. *Tax-Favored Higher Education Savings Benefits and Their Relationship to Traditional Federal Student Aid*. Congressional Research Service Report RL32155. Washington, DC: updated January 18, 2008.

Levine, Linda and David Smole. *Federal Tax Benefits for Families' K-12 Education Expenses in the Context of School Choice*. Congressional Research Service Report RL31439. Washington, DC: updated January 27, 2006.

Ma, Jennifer. *Education Savings Incentives and Household Saving: Evidence from the 2000 TIAA-CREF Survey of Participant Finances*. National Bureau of Economic Research, Working Paper 9505. Cambridge, MA: February 2003.

Ma, Jennifer. *To Save or Not to Save: A Closer Look at Saving and Financial Aid*. TIAA-CREF Institute, Working Paper 18-120103. NY, NY: December 2003.

Ma, Jennifer and Douglas Fore. "Saving for College with 529 Plans and Other Options," *Journal of Retirement Planning*, September-October 2002.

Wolanin, Thomas R. "How Do Student Financial Aid and Tax Policy Fit Together: Relating HEA Programs to Education Tax Breaks?" in *Reauthorizing the Higher Education Act*. Washington, DC: Institute for Higher Education Policy, March 2003.

EXCLUSION OF INTEREST ON EDUCATION SAVINGS BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	-	([1])
2009	([1])	-	([1])
2010	([1])	-	([1])
2011	([1])	-	([1])
2012	([1])	-	([1])

([1])Less than $50 million.

Authorization

Section 135.

Description

Eligible taxpayers can exclude from their gross income all or part of the interest on U.S. Series EE or Series I Savings Bonds when the bonds are used to pay qualified higher education expenses of the taxpayer or the taxpayer's spouse or dependents. Series EE Bonds are accrued bonds which earn a variable interest rate equal to 90% of the average yield on 5-year Treasury securities for the preceding six months. Series I Bonds are accrued bonds which earn a fixed rate of return plus a variable semi-annual inflation rate. The bonds must have been issued after 1989 and be both purchased and owned by persons who are age 24 or over. If the total amount of principal and interest on bonds redeemed during a year exceeds the amount of qualified education expenses, the amount of the interest exclusion is reduced proportionately.

Qualified higher education expenses generally are restricted to tuition and fees required for enrollment or attendance at eligible institutions. Tuition and fees are not taken into account if they are paid with tax-exempt scholarships, veterans' education assistance, employer education assistance, and distributions from Qualified Tuition Programs or from Coverdell ESAs, or if a tax credit or deduction is claimed for them. Expenditures for courses in sports, games, or hobbies are not considered unless they are part of a degree program. Contributions to Qualified Tuition Programs or to Coverdell ESAs are considered qualified expenses if made with redeemed proceeds. Eligible institutions are those eligible to participate in U.S. Department of Education student aid programs; these include most accredited public, private, and proprietary postsecondary institutions.

The interest exclusion is phased out for middle- and upper-income taxpayers. The phase-out ranges are based on the taxpayer's modified adjusted gross income in the year in which the bond is applied toward qualified expenses. The ranges are adjusted annually for inflation. The phase-out range for a married couple filing jointly and for widow(er)s is $98,400 to $128,400. (Married couples must file a joint return to take the exclusion.) For all others, it is $65,600 to $80,600.

Impact

Education Saving Bonds provide lower- and middle-income families with a tax-favored way to save for higher education that is convenient and often familiar. The benefits are greater for families who live in states and localities with high income taxes because the interest income from Series EE and Series I Bonds is exempt from State and local income taxes.

Rationale

The interest exclusion for Education Savings Bonds was created by the Technical and Miscellaneous Revenue Act of 1988, making it among the earliest congressional efforts to assist family financing of postsecondary education. It reflects a long-held congressional concern that families have difficulty paying for college, particularly with the cost of higher education often rising faster than prices in general. If families would save more prior to their children's enrollment in college, they might find it easier to meet the cost without relying on student aid or borrowing. Although the tax provision has been subject to a number of technical and coordinating amendments since its inception (e.g., to take into account more recently enacted education tax benefits), the basic requirements have remained the same.

Assessment

The benefits of Education Savings Bonds depend on several factors, including how soon taxpayers begin to save, the return on alternative savings plans, a taxpayer's marginal income tax rate, and the burden of State and local income taxes. For many taxpayers, the after-tax rate of return on Education Savings Bonds is approximately the same as the after-tax rate of return on other government securities with a similar term. Like other U.S. government securities, the interest income from Series EE and Series I Savings Bonds is exempt from State and local income taxes.

The tax savings from the exclusion are greater for taxpayers in higher tax brackets. These savings would be partially offset by the below-market yield of these savings bonds. However, both Series EE and Series I Bonds are a safe way to save, and many taxpayers may find it easier to purchase and redeem them than other Treasury securities.

Since the interest exclusion for Education Savings Bonds can be limited when the bonds are redeemed, families intending to use them for college expenses must predict their income eligibility far in advance. They must also anticipate the future costs of tuition and fees and whether their children might receive scholarships. Further, unless students are tax dependents of their grandparents for example, the relatives cannot take the exclusion on bond interest used to pay the students' qualified expenses. In these respects, the bonds may not be as attractive an investment as some other education savings vehicles.

Selected Bibliography

Davis, Albert J. "Choice Complexity in Tax Benefits for Higher Education," National Tax Journal, v. 55, no. 3 (September 2002). pp. 509-530.

Hubbard, R. Glenn and Jonathan S. Skinner. "Assessing the Effectiveness of Saving Incentives," *The Journal of Economic Perspectives*, v. 10, no. 4 (Fall 1996). pp. 73-90.

Investment Company Institute. *Profile of Households Saving for College*. Washington, DC: Fall 2003.

Levine, Linda and Charmaine Mercer. *Tax-Favored Higher Education Savings Benefits and Their Relationship to Traditional Federal Student Aid*. Congressional Research Service Report RL32155. Washington, DC: updated January 18, 2008.

DEDUCTION FOR HIGHER EDUCATION EXPENSES

Estimated Revenue Loss*

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.2	-	1.2
2009	2.5	-	2.5
2010	0.7	-	0.7
2011	-	-	-
2012	-	-	-

Authorization

Section 222.

Description

Taxpayers may deduct qualified tuition and related expenses for postsecondary education from their adjusted gross income. The deduction is "above-the-line," that is, it is not restricted to itemizers. Taxpayers are eligible for the deduction if they pay qualified expenses for themselves, their spouses, or their dependents. Individuals who may be claimed as dependents on another taxpayer's return, married persons filing separately, and nonresident aliens who do not elect to be treated as resident aliens cannot take the deduction.

The maximum deduction per return is $4,000 for taxpayers with modified adjusted gross income that does not exceed $65,000 ($130,000 on joint returns). Taxpayers with incomes above $65,000 ($130,000 for joint returns) but not above $80,000 ($160,000 for joint returns) can deduct up to $2,000 in qualified expenses. These income limits are not adjusted for inflation and there is no phase-out of the deduction based upon income.

The deduction may be taken for qualified tuition and related expenses in lieu of claiming the Hope Scholarship Credit or Lifetime Learning Credit for the same student. Taxpayers cannot deduct qualified expenses under Section 222 if they deduct these expenses under any other provision in the Code (e.g., the itemized deduction for education that maintains or improves skills required in a taxpayer's current profession).

Before the deduction can be taken, qualified expenses must be reduced if financed with scholarships, Pell Grants, employer-provided educational assistance, veterans' educational assistance, and any other nontaxable income (other than gifts and inheritances). Qualified expenses also must be reduced if paid with tax-free interest from Education Savings Bonds, tax-free distributions from Coverdell Education Savings Accounts, and tax-free earnings withdrawn from Qualified Tuition Plans.

Qualified tuition and related expenses are tuition and fees required for enrollment or attendance in an institution eligible to participate in U.S. Department of Education student aid programs; these include most accredited public, private, and proprietary postsecondary institutions. Like the Lifetime Learning Credit, the deduction may be taken for any year of undergraduate or graduate enrollment. It too is available to part-time and full-time students, and the program need not lead to a degree, credential, or certificate.

Impact

The deduction benefits taxpayers according to their marginal tax rate (see Appendix A). Students usually have relatively low tax rates, but they may be part of families in higher tax brackets. As shown in the table below, most of the deductions are taken by higher income families. The maximum amount of deductible expenses limits the tax benefit's impact on individuals attending schools with comparatively high tuition and fees. Because the income limits are not adjusted for inflation, the deduction might be available to fewer taxpayers over time.

Distribution by Income Class of Education Deduction at 2006 Income Levels

Income Class (in thousands of $)	Percentage Distribution
Below $10	19.8
$10 to $20	6.9
$20 to $30	5.2
$30 to $40	3.9
$40 to $50	6.4
$50 to $75	14.1
$75 to $100	11.1
$100 to $200	32.7
$200 and over	0.0

Source: Data obtained from IRS *Statistics of Income.* This is not a distribution of the tax expenditures, but of the deduction; it is classified by adjusted gross income.

Rationale

The temporary deduction was authorized by the Economic Growth and Tax Relief Reconciliation Act of 2001, and reauthorized through December 31, 2009 as part of the Emergency Economic Stabilization Act of 2008 at Division C. The deduction builds upon postsecondary tax benefits that were initiated by the Taxpayer Relief Act of 1997. It is one additional means that Congress has chosen to help families who are unlikely to qualify for much need-based federal student aid pay for escalating college expenses.

Assessment

The deduction has been criticized for adding to the complexity faced by families trying to determine which higher education tax benefits they are eligible for and what combination is their optimal mix for financing postsecondary education. Since 2002, for example, those taxpayers whose incomes fell below the Hope Scholarship or Lifetime Learning credits' lower income cutoff could claim either a credit or the deduction. In addition, the deduction must be coordinated with tax-advantaged college savings vehicles (e.g., the Coverdell Education Savings Accounts and Qualified Tuition Plans).

Selected Bibliography

Burman, Leonard E. with Elaine Maag, Peter Orszag, Jeffrey Rohaly, and John O'Hare. *The Distributional Consequences of Federal Assistance for Higher Education: The Intersection of Tax and Spending Programs*, The Urban Institute, Discussion Paper No. 26. Washington, DC: August 2005.

Davis, Albert J. "Choice Complexity in Tax Benefits for Higher Education," *National Tax Journal*, v. 55, no. 3 (September 2002). pp. 509-530.

Levine, Linda. *Education Tax Benefits: Are They Permanent or Temporary?* Congressional Research Service Report RS21870. Washington, DC: updated October 3, 2008.

Levine, Linda and Charmaine Mercer. *Higher Education Tax Credits and Deduction: An Overview of the Benefits and Their Relationship to Traditional Student Aid*. Congressional Research Service Report RL31129. Washington, DC: updated January 18, 2008.

U.S. Government Accountability Office. *Student Aid and Postsecondary Tax Preferences*, GAO-05-684. Washington, DC: July 2005.

EXCLUSION OF TAX ON EARNINGS OF QUALIFIED TUITION PROGRAMS

Prepaid Tuition Programs

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	-	0.1
2009	0.1	-	0.1
2010	0.1	-	0.1
2011	0.2	-	0.2
20120	0.2	-	0.2

Savings Account Programs

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.5	-	0.5
2009	0.5	-	0.5
2010	0.8	-	0.8
2011	1.1	-	1.1
2012	1.3	-	1.3

Authorization

Section 529.

Description

There are two types of Qualified Tuition Programs (QTPs) that allow persons to pay in advance or save for college expenses for designated beneficiaries: prepaid tuition plans and college savings plans. The former enable account owners to make payments on behalf of beneficiaries for a specified number of academic periods or course units at current prices, thus providing a hedge against tuition inflation. The latter enable payments to be made on behalf of beneficiaries into a variety of investment vehicles offered by plan sponsors (e.g., age-based portfolios whose mix of stocks and bonds changes the closer the beneficiary's matriculation date or an option with a guaranteed rate of return); the balances in college savings accounts can be applied toward a panoply of qualified higher education expenses (e.g., tuition and fees, books, supplies, and room and board).

Initially, only States could sponsor QTPs. Starting in 2002, one or more eligible institutions of higher education could establish prepaid tuition plans. Eligible institutions are those eligible to participate in U.S. Department of Education student aid programs; these include most accredited public, private, and proprietary postsecondary institutions. States remain the sole sponsors of tax-advantaged college savings plans.

To be qualified, a QTP must receive cash contributions, maintain separate accounting for each beneficiary, and not allow investments to be directed by contributors and beneficiaries. (The last restriction has been loosened somewhat as account owners now can make tax-free transfers from one QTP to another for the same beneficiary once in any 12-month period.) A contributor may fund multiple accounts for the same beneficiary in different States, and an individual may be the designated beneficiary of multiple accounts.

The specifics of plans vary greatly from one State to another. Plan sponsors may establish restrictions that are not mandated either by the Code or federal regulation. There are no income caps on contributors, unlike the limits that generally apply to taxpayers who want to claim the other higher education benefits. Similarly, there is no annual limit on contributions, unlike the case with the Coverdell Education Savings Account (ESA).

There is no federal income tax deduction for contributions to QTPs. Payments to QTPs are considered completed gifts of present interest from the contributor to the beneficiary meaning that an individual could contribute up to $12,000 in 2007 (subject to indexation) as a tax-free gift per QTP beneficiary. A special gifting provision allows a QTP contributor to make an excludable gift of up to $60,000 in one year by treating the payment as if it were made over 5 years. By making QTP contributions completed gifts, their value generally is removed from the contributor's taxable estate.

Earnings on contributions accumulate on a tax-deferred basis. Starting in 2002 for State-sponsored plans and in 2004 for programs of higher education institutions, earnings withdrawn to pay qualified expenses are free from federal income tax. This change, as well as other QTP amendments included in the Economic Growth and Tax Relief Reconciliation Act of 2001, were due to expire after December 31, 2010; however, Congress made the changes permanent in the Pension Protection Act of 2006.

Except in the case of the beneficiary's death, disability, or receipt of a scholarship, veterans educational assistance allowance or other nontaxable payment for educational purposes (excluding a gift or inheritance), a 10% tax penalty is assessed on the earnings portion of distributions that exceed or are not used toward qualified higher education expenses. Nonqualified earnings withdrawals are taxable to the distributee as well. An account owner can avoid paying income tax and a penalty on nonqualified distributions by transferring the account to a new beneficiary who is a family member of the old beneficiary.

Contributions can be made to a QTP and to a Coverdell ESA in the same year for the same beneficiary effective after 2001. Also starting in 2002, the higher education tax credits can be claimed for tuition and fees in the same year that tax-free distributions are made from a QTP or a Coverdell ESA on behalf of the same beneficiary, provided that the distributions are not used toward the same expenses for which the credits/deduction are claimed.

Impact

The tax deferral and more recently enacted exclusion from income of account earnings used to pay qualified expenses benefits tax filing units according to their marginal tax rate (see Appendix A). The tax benefits of QTPs are more likely to accrue to higher income families because they have higher tax rates and the means to save for college.

Tax benefits from QTPs might be offset by reductions in federal student aid, much of which is awarded to students based on their financial need. For most aid applicants, the impact is felt to the extent that balances in QTPs (assets) and withdrawals from them (income) are expected to be contributed toward postsecondary education expenses under the traditional federal student aid system: a greater expected family contribution (EFC) can lead to reduced financial need and decreased eligibility for federal student aid. The Department of Education has not provided aid applicants with clear and timely information on whose assets and income the QTPs are — the student or the parent — a difference which greatly affects the EFC. Congress, in amendments to the Higher Education Act of 1965 included in the Deficit Reduction Act of 2005 and the College Cost Reduction and Access Act of 2007, attempted to clarify the confusion that surrounds the need-analysis treatment of QTP prepaid tuition plans and college savings plans.

Rationale

QTPs have been established in response to widespread concern about the rising cost of college. The tax status of the first program, the Michigan Education Trust, was the subject of several federal court rulings that left major issues unresolved. Congress eventually clarified most questions in enacting section 529 as part of the Small Business Job Protection Act of 1996.

Assessment

The tax benefit can be justified as easing the financial burden of college expenses for families and encouraging savings for college. The benefits are generally limited to higher income individuals.

Families have preferred college savings plans over prepaid tuition plans because the former potentially offer higher returns and because college savings plans, until recently, received more favorable treatment under some federal student aid programs. Despite the steep decline in stock prices early in the current decade and the increased awareness of the fees associated with plans sold by financial advisors in particular, college savings accounts remained the most popular type of 529 plan through 2008. (Broker-sold college savings plans impose investment fees in addition to the administrative and other fees charged by plans sold directly by the States.) While the changed treatment of prepaid tuition plans in the EFC calculation could entice more families to invest in them, they too have suffered from the poor performance of the stock market (in which the funds of prepaid plans typically are invested). In addition, the continuing rapid rise in college costs has prompted some States to change the terms of their prepaid tuition plans or to stop accepting contributions.

Selected Bibliography

Clancy, Margaret and Michael Sherraden. *The Potential for Inclusion in 529 Savings Plans: Report on a Survey of States*. Center for Social Development, Washington University. St. Louis, MO: December 2003.

Crenshaw, Albert B. "Prepaid Tuition A Future Flunk-Out?," *Washington Post*, Nov. 14, 2004.

Dynarksi, Susan M. *Who Benefits from the Education Savings Incentives? Income, Educational Expectations, and the Value of the 529 and Coverdell*. National Bureau of Economic Research, Working Paper 10470. Cambridge, MA: May 2004.

Investment Company Institute. *Profile of Households Saving for College*. Washington, DC: Fall 2003.

Levine, Linda. *Saving for College Through Qualified Tuition (Section 529) Programs*. Congressional Research Service Report RL31214. Washington, DC: updated March 26, 2008.

Levine, Linda and Charmaine Mercer. *Tax-Favored Higher Education Savings Benefits and Their Relationship to Traditional Federal Student Aid*. Congressional Research Service Report RL32155. Washington, DC: updated January 18, 2008.

Lumina Foundation for Education. "When Saving Means Losing: Weighing the Benefits of College-savings Plans," *New Agenda Series*, July 2004.

Ma, Jennifer. *Education Savings Incentives and Household Saving: Evidence from the 2000 TIAA-CREF Survey of Participant Finances*. National Bureau of Economic Research, Working Paper 9505. Cambridge, MA: February 2003.

Ma, Jennifer. *To Save or Not to Save: A Closer Look at Saving and Financial Aid*. TIAA-CREF Institute, Working Paper 18-120103. NY, NY: December 2003.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT STUDENT LOAN BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.4	0.1	0.5
2009	0.4	0.2	0.6
2010	0.4	0.2	0.6
2011	0.5	0.2	0.7
2012	0.5	0.2	0.7

Authorization

Sections 103, 141, 144(b), and 146.

Description

Student loan bonds are bonds issued by States to finance reduced rate student loans. Specifically, student loan bonds are related to direct subsidy assistance provided by the Federal Family Education Loan Program that consists of Stafford loans ("subsidized" and "unsubsidized") and "PLUS loans."

The Stafford Loan program:

(1) provides a guarantee to commercial lenders against loan default;

(2) makes an interest-rate subsidy in the form of a Special Allowance Payment (SAP), which for commercial lenders (banks) fluctuates with the rate on 3-month commercial paper and makes up the difference between the interest rate the student pays and the interest that banks could earn on alternative investments;

(3) forgoes both accrual and payment of interest and principal while the student is in school and for six months after the student leaves school for Stafford "subsidized" loans only;

(4) requires that interest be paid while students are in school for Stafford "unsubsidized" loans, so the Federal subsidy is less than on Stafford "subsidized" loans.

PLUS loans are also guaranteed against default, but the maximum interest rates are higher, and interest is paid while students are in school. The interest rates that borrowers pay under the Stafford and PLUS programs are set by law and are the same regardless of whether loan financing comes from taxable or tax-exempt sources. Thus, tax-exempt borrowing does not provide lower interest rates for borrowers, but it does broaden access to loans by enabling State and local nonprofit authorities to make loans that may otherwise not be provided.

These bonds are subject to the private-activity bond annual volume cap and must compete for cap allocations with bond proposals for all other private activities subject to the volume cap.

Impact

Since interest on the student loan bonds is tax exempt, purchasers are willing to accept lower pre-tax rates of interest than on taxable securities. The relatively low interest rate may increase the availability of student loans because States may be more willing to lend to more students. However, the interest rate paid by the students is not any lower since the rate is set by Federal law. Student loan bonds also create a secondary market for student loans that compares favorably with the private sector counterpart in the secondary market for student loans, the Student Loan Marketing Association.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and student borrowers, and for estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Although the first student loan bonds were issued in the mid-1960s, few States used them in the next ten years. The use of student loan bonds began growing rapidly in the late 1970s because of the combined effect of three pieces of legislation.

First, the Tax Reform Act of 1976 authorized nonprofit corporations established by State and local governments to issue tax-exempt bonds to acquire guaranteed student loans. It exempted the special allowance payment from tax-code provisions prohibiting arbitrage profits (borrowing at low interest rates and investing the proceeds in assets (*e.g.*, student loans) paying higher interest rates). State authorities could use arbitrage earnings to make or purchase additional student loans or turn them over to the State government or a political subdivision. This provided incentives for State and local governments to establish more student loan authorities. State authorities could also offer discounting and other features private lenders could not because of the lower cost of tax-exempt debt financing.

Second, the Middle Income Student Assistance Act of 1978 made all students, regardless of family income, eligible for interest subsidies on their loans, expanding the demand for loans by students from higher-income families.

Third, legislation in 1976 raised the ceiling on SAPs and tied them to quarterly changes in the 91-day Treasury bill rate. The Higher Education Technical Amendments of 1979 removed the ceiling, making the program more attractive to commercial banks and other lenders, and increasing the supply of loans.

In 1980, when Congress became aware of the profitability of tax-exempt student loan bond programs, it passed remedial legislation that reduced by one-half the special allowance rate paid on loans originating from the proceeds of tax-exempt bonds.

Subsequently, the Deficit Reduction Act of 1984 mandated a Congressional Budget Office study of the arbitrage treatment of student loan bonds, and required that Treasury enact regulations if Congress failed to respond to the study's recommendations.

Regulations were issued in 1989, effective in 1990, that required Special Allowance Payments to be included in the calculation of arbitrage profits, and that restricted arbitrage profits to 2.0 percentage points in excess of the yield on the student loan bonds. The Tax Reform Act of 1986 allowed student loans to earn 18 months of arbitrage profits on unspent (not loaned) bond proceeds. This special provision expired one-and-a-half years after adoption, and student loans are now subject to the same six-month restriction on arbitrage earnings as other private-activity bonds.

The Tax Reform Act of 1986 also included student loan bonds under the unified volume cap on private-activity bonds.

Assessment

The desirability of allowing these bonds to be eligible for tax-exempt status hinges on one's view of whether students should pay the full cost of their education, or whether sufficient social benefits exist to justify taxpayer subsidy. Students present high credit risk due to their uncertain earning prospects, high mobility, and society's unwillingness to accept human capital as loan collateral (via indentured servitude or slavery). This suggests there may be insufficient funds available for human, as opposed to physical, capital investments.

Even if a case can be made for subsidy due to underinvestment in human capital, it is not clear that tax-exempt financing is necessary to correct the market failure. The presence of federally subsidized guaranteed and direct loans already addresses the problem. In addition, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, bonds issued for student loans have increased the financing costs of bonds issued for public capital stock, and have increased the supply of assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Lochner, Lance J., and Alexander Monge-Naranjo. "The Nature of Credit Constraints and Human Capital," *National Bureau of Economic Research*, NBER Woking Paper 13912, April 2008.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

Neubig, Tom. "The Needless Furor Over Tax-Exempt Student Loan Bonds," *Tax Notes*, April 2, 1984, pp. 93-96.

Oosterbeek, Hessel. "Innovative Ways to Finance Education and Their Relation to Lifelong Learning," *Education Economics*, v. 6, no. 3, (Dec. 1998), pp. 219-251.

U.S. Congress, Congressional Budget Office. Statement of Donald B. Marron before the Subcommittee on Select Revenue Measures Committee on Ways and Means U.S. House of Representatives. "Economic Issues in the Use of Tax-Preferred Bond Financing," March 16, 2006.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

— , and Barbara Miles. "Substituting Direct Government Lending for Guaranteed Student Loans: How Budget Rules Distorted Economic Decision Making," *National Tax Journal,* v. 47, no. 4 (December 1994), pp. 773-787.

Education, Training, Employment, and Social Services:
Education and Training

EXCLUSION OF EMPLOYER-PROVIDED TUITION REDUCTION

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	-	0.2
2009	0.2	-	0.2
2010	0.2	-	0.2
2011	0.2	-	0.2
2012	0.2	-	0.2

Authorization

Section 117(d).

Description

Tuition reductions for employees of educational institutions may be excluded from federal income taxes, provided they do not represent payment for services. The exclusion applies as well to tuition reductions for an employee's spouse and dependent children. Tuition reductions can occur at schools other than where the employee works, provided they are granted by the school attended, and not paid for by the employing school. Tuition reductions cannot discriminate in favor of highly compensated employees.

Impact

The exclusion of tuition reductions reduces the net cost of education for employees of educational institutions. When teachers and other school employees take reduced-tuition courses, the exclusion provides a tax benefit not available to other taxpayers unless their courses are job-related or included under an employer education assistance plan (Section 127). When

their spouse or children take reduced-tuition courses, the exclusion provides a unique benefit unavailable to other taxpayers.

Rationale

Language regarding tuition reductions was added by the Deficit Reduction Act of 1984 as part of legislation codifying and establishing boundaries for tax-free fringe benefits; similar provisions had existed in regulations since 1956.

Assessment

Tuition reductions are provided by education institutions to employees as a fringe benefit, which may reduce costs of labor and turnover. In addition, tuition reductions for graduate students providing research and teaching services for the educational institution also contribute to reducing the labor costs. Both employees and graduate students may view the reduced tuition as a benefit of their employment that encourages education.

Selected Bibliography

U.S. Congress, Joint Committee on Taxation, *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 198*4, JCS-41-84, December 31, 1984.

EXCLUSION OF SCHOLARSHIP AND FELLOWSHIP INCOME

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.8	-	1.8
2009	1.9	-	1.9
2010	2.0	-	2.0
2011	2.1	-	2.1
2012	2.2	-	2.2

Authorization

Section 117.

Description

Scholarships and fellowships include awards based upon financial need (e.g., Pell Grants) as well as those based upon scholastic achievement or promise (e.g., National Merit Scholarships). In recent years, interest has arisen in utilizing scholarships to promote school choice at the elementary and secondary levels in lieu of relying upon publicly funded vouchers.

Scholarships and fellowships can be excluded from the gross income of students or their families provided: (1) the students are pursuing degrees (or are enrolled in a primary or secondary school); and (2) the amounts are used for tuition and fees required for enrollment or for books, supplies, fees, and equipment required for courses at an eligible educational institution. Eligible educational institutions maintain a regular teaching staff and curriculum and have a regularly enrolled student body attending classes where the school carries out its educational activities. Amounts used for room, board, and incidental expenses are not excluded from gross income.

Generally, amounts representing payment for services — teaching, research, or other activities — are not excludable, regardless of when the service is performed or whether it is required of all degree candidates. An exception to the rule went into effect for awards received after 2001 under the National Health Service Corps Scholarship Program and the Armed Forces Health Professions Scholarship and Financial Assistance Program.

Impact

The exclusion reduces the net cost of education for students who receive financial aid in the form of scholarships or fellowships. The potential benefit is greatest for students at private schools, where higher tuition charges increase the amount of scholarship or fellowship assistance that might be excluded. For students at public institutions with low tuition charges, the exclusion may apply only to a small portion of a scholarship or fellowship award since most ot the award may cover room and board and other costs.

The effect of the exclusion may be negligible for students with little additional income: they could otherwise use their standard deduction or personal exemption to offset scholarship or fellowship income (though their personal exemption would be zero if their parents could claim them as dependents). On the other hand, the exclusion may result in a more substantial tax benefit for married postsecondary students who file joint returns with their employed spouses.

Rationale

Section 117 was enacted as part of the Internal Revenue Code of 1954 in order to clarify the tax status of grants to students; previously, they could be excluded only if it could be established that they were gifts. The statute has been amended a number of times. Prior to the Tax Reform Act of 1986, the exclusion was also available to individuals who were not candidates for a degree (though it was restricted to $300 a month with a lifetime limit of 36 months), and teaching and other service requirements did not bar use of the exclusion, provided all candidates had such obligations.

Assessment

The exclusion of scholarship and fellowship income traditionally was justified on the grounds that the awards were analogous to gifts. With the development of grant programs based upon financial need, which today probably account for most awards, justification now rests upon the hardship that taxation would impose.

If the exclusion were abolished, awards could arguably be increased to cover students' additional tax liability, but the likely effect would be that fewer students would get assistance. Scholarships and fellowships are not the only educational subsidies that receive favorable tax treatment (e.g., government support of public colleges, which has the effect of lowering tuition, is not considered income to the students), and it might be inequitable to tax them without taxing the others.

The exclusion provides greater benefits to taxpayers with higher marginal tax rates. While students themselves generally have low (or even zero) marginal rates, they often are members of families subject to higher rates. Determining what ought to be the proper taxpaying unit for college students complicates assessment of the exclusion.

Selected Bibliography

Abramowicz, Kenneth F. "Taxation of Scholarship Income," *Tax Notes*, v. 60. November 8, 1993, pp. 717-725.

Crane, Charlotte. "Scholarships and the Federal Income Tax Base," *Harvard Journal on Legislation*, v. 28. Winter 1991, pp. 63-113.

Dodge, Joseph M. "Scholarships under the Income Tax," *Tax Lawyer*, v. 46. Spring, 1993, pp. 697-754.

Evans, Richard, *et. al*. "Knapp v. Commissioner of Internal Revenue: Tuition Assistance or Scholarship, a Question of Taxation," *The Journal of College and University Law*, v. 16. Spring 1990, pp. 699-712.

Hoeflich, Adam. "The Taxation of Athletic Scholarships: A Problem of Consistency,." *University of Illinois Law Review*, 1991, pp. 581-617.

Jackson, Pamela, *An Overview of Tax Benefits for Higher Education Expenses*, Congressional Research Service Report RL32554, Washington, DC., 2008.

Kelly, Marci. "Financing Higher Education: Federal Income-Tax Consequences," *The Journal of College and University Law*, v. 17. Winter 1991, pp. 307-328.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT BONDS FOR PRIVATE NONPROFIT AND QUALIFIED PUBLIC EDUCATIONAL FACILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.0	0.8	2.8
2009	2.1	0.8	2.9
2010	2.2	0.9	3.1
2011	2.5	1.0	3.5
2012	2.6	1.0	3.6

Authorization

Section 103, 141, 142(k), 145, 146, and 501(c)(3).

Description

Interest income on State and local bonds used to finance the construction of nonprofit educational facilities (usually university and college facilities such as classrooms and dormitories) and qualified public educational facilities is tax exempt. These nonprofit organization bonds are classified as private-activity bonds rather than governmental bonds because a substantial portion of their benefits accrues to individuals or business rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Bonds issued for nonprofit educational facilities are not subject to the State volume cap on private activity bonds. This exclusion probably reflects the belief that the nonprofit bonds have a larger component of benefit to the

general public than do many of the other private activities eligible for tax exemption. The bonds are subject to a $150 million cap on the amount of bonds any nonprofit institution can have outstanding.

Bonds issued for qualified public education facilities are subject to a separate State-by-State cap: the greater of $10 per capita or $5 million annually.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to finance educational facilities at reduced interest rates. Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and users of the nonprofit educational facilities, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

An early decision of the U.S. Supreme Court predating the enactment of the first Federal income tax, *Dartmouth College v. Woodward* (17 U.S. 518 [1819]), confirmed the legality of government support for charitable organizations that provided services to the public. The income tax adopted in 1913, in conformance with this principle, exempted from taxation virtually the same organizations now included under Section 501(c)(3). In addition to their tax-exempt status, these institutions were permitted to receive the benefits of tax-exempt bonds under *The Revenue and Expenditure Control Act of 1968*. Almost all States have established public authorities to issue tax-exempt bonds for nonprofit educational facilities.

The interest exclusion for qualified public educational facilities was provided for in the *Economic Growth and Tax Relief Reconciliation Act of 2001* and is intended to extend tax preferences to public school facilities which are owned by private, for-profit corporations. The school must have, however, a public-private agreement with the local education authority. The private-activity bond status of these bonds subjects them to more severe restrictions in some areas, such as arbitrage rebate and advance refunding, than would apply if they were classified as traditional governmental school bonds.

Assessment

Efforts have been made to reclassify nonprofit bonds as governmental bonds. Central to this issue is the extent to which nonprofit organizations are fulfilling their public purpose. Some argue that these entities are using their tax-exempt status to subsidize goods and services for groups that might receive more critical scrutiny if they were subsidized by direct federal expenditure.

As one of many categories of tax-exempt private-activity bonds, nonprofit educational facilities and public education bonds have increased the financing costs of bonds issued for more traditional public capital stock. In addition, this class of tax-exempt bonds has increased the supply of assets that individuals and corporations can use to shelter income from taxation.

Selected Bibliography

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

Plummer, Elizabeth. "The Effects of State Funding on Property Tax Rates and School Construction," *Economics of Education Review*, vol. 25, no. 5, October 2006.

U.S. Congress, Joint Committee on Taxation, *General Explanation of Tax Legislation Enacted in the 107th Congress*, Joint Committee Print JCS-1-03, January 24, 2003.

Weisbrod, Burton A. *The Nonprofit Economy*. Cambridge, Mass.: Harvard University Press, 1988.

Zimmerman, Dennis. "Nonprofit Organizations, Social Benefits, and Tax Policy," *National Tax Journal*. September 1991, pp. 341-349.

— . *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activities*. Washington, DC: The Urban Institute Press, 1991.

TAX CREDIT FOR HOLDERS OF QUALIFIED ZONE ACADEMY BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	0.1	0.1
2009	-	0.2	0.2
2010	-	0.2	0.2
2011	-	0.2	0.2
2012	-	0.2	0.2

Authorization

Section 1397E.

Description

Holders of qualified zone academy bonds (QZABs) can claim a credit equal to the dollar value of the bonds held multiplied by a credit rate determined by the Secretary of the Treasury. The credit rate is equal to the percentage that will permit the bonds to be issued without discount and without interest cost to the issuer. The maximum maturity of the bonds is that which will set the present value of the obligation to repay the principal equal to 50 percent of the face amount of the bond issue. The discount rate for the calculation is the average annual interest rate on tax-exempt bonds issued in the preceding month having a term of at least 10 years. The bonds must be purchased by a bank, insurance company, or a corporation in the business of lending money.

A qualified zone academy must be a public school below the college level. It must be located in an Empowerment Zone or Enterprise Community, or have a student body whose eligibility rate for free or reduced-cost lunches

is at least 35 percent. Ninety-five percent of bond proceeds must be used within five years to renovate capital facilities, provide equipment, develop course materials, or train personnel. The academy must operate a special academic program in cooperation with businesses, and private entities must contribute equipment, technical assistance, employee services, or other property worth at least 10 percent of bond proceeds. The limit for new QZAB debt is $400 million in each year of 1998 through 2009.

Impact

The interest income on bonds issued by State and local governments usually is excluded from Federal income tax (see the entry "Exclusion of Interest on Public Purpose State and Local Debt"). Such bonds result in the Federal Government paying a portion (approximately 25 percent) of the issuer's interest costs. QZABs are structured to have the entire interest cost of the State or local government paid by the Federal Government in the form of a tax credit to the bond holders. QZABs are not tax-exempt bonds.

The cost has been capped at the value of federal tax credits generated by the $4.0 billion QZAB volume. If the school districts in any State do not use their annual allotment, the unused capacity can be carried forward for up to two years.

Rationale

The Taxpayer Relief Act of 1997 created QZABs. Some low-income school districts were finding it difficult to pass bond referenda to finance new schools or to rehabilitate existing schools. Increasing the size of the existing subsidy provided by tax-exempt bonds from partial to 100 percent Federal payment of interest costs was expected to make school investments less expensive and therefore more attractive to taxpayers in these poor districts. The tax provision is also intended to encourage public/private partnerships, and eligibility depends in part on a school district's ability to attract private contributions that have a present value equal to at least 10 percent of the value of the bond proceeds. P.L. 109-432 extended QZAB's for two years (for 2006 and 2007), introduced the five year spending horizon, and applied arbitrage rules. P.L. 110-343 extended the QZAB with $400 million for each of 2008 and 2009.

Assessment

One way to think of this alternative subsidy is that financial institutions can be induced to purchase these bonds if they receive the same after-tax return from the credit that they would from the purchase of tax-exempt bonds. The value of the credit is included in taxable income, but is used to

reduce regular or alternative minimum tax liability. Assuming the taxpayer is subject to the regular corporate income tax, the credit rate should equal the ratio of the purchaser's forgone market interest rate on tax-exempt bonds divided by one minus the corporate tax rate. For example, if the tax-exempt interest rate is 6 percent and the corporate tax rate is 35 percent, the credit rate would be equal to .06/(1-.35), or about 9.2 percent. Thus, a financial institution purchasing a $1,000 zone academy bond would receive a $92 tax credit for each year it holds the bond.

With QZABs, the Federal Government pays 100 percent of interest costs; tax-exempt bonds that are used for financing other public facilities finance only a portion of interest costs. For example, if the taxable rate is 8 percent and the tax-exempt rate is 6 percent, the non-zone bond receives a subsidy equal to two percentage points of the total interest cost, the difference between 8 percent and 6 percent. The zone academy bond receives a subsidy equal to all 8 percentage points of the interest cost. Thus, this provision reduces the price of investing in schools compared to investing in other public services provided by a governmental unit, and other things equal should cause some reallocation of the unit's budget toward schools. In addition, the entire subsidy (the cost to the Federal taxpayer) is received by the issuing government in the form of reduced interest costs, unlike tax-exempt bonds in which part of the Federal revenue loss is a windfall gain for some purchasers and does not act to reduce the issuing government's interest cost.

Selected Bibliography

Congressional Budget Office, *Tax Credit Bonds and the Federal Cost Financing Public Expenditures*, July 2004.

Davie, Bruce, "Tax Credit Bonds for Education: New Financial Instruments and New Prospects," *Proceedings of the 91st Annual Conference on Taxation*, National Tax Association.

Joint Committee on Taxation, *Present Law and Issues Related to Infrastructure Finance,* Joint Committee Print JCX-83-08, October 29, 2008.

Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

Joint Committee on Taxation, *General Explanation of Tax Legislation Enacted in 1997*, Joint Committee Print JCS-23-97, December 17, 1997, 40-41.

Maguire, Steven. *Tax Credit Bonds: A Brief Explanation.* Library of Congress, Congressional Research Service Report RS20606. August 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

Matheson, Thornton. "Qualified Zone Academy Bond Issuance and Investment: Evidence from 2004 Form 8860 Data," *Statistics of Income Bulletin*, Internal Revenue Service, Spring 2007, pp. 155-162.

Education, Training, Employment and Social Services:
Education and Training

EXCLUSION OF INCOME ATTRIBUTABLE TO THE DISCHARGE OF CERTAIN STUDENT LOAN DEBT AND NHSC EDUCATIONAL LOAN REPAYMENTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	-	0.1
2009	0.1	-	0.1
2010	0.1	-	0.1
2011	0.1	-	0.1
2012	0.1	-	0.1

Authorization

Section 108(f); 20 U.S.C. § 1087ee(a)(5); and 42 U.S.C. § 254l-1(g)(3).

Description

In general, cancelled or forgiven debt, or debt that is repaid on the borrower's behalf is included as gross income for purposes of taxation under § 61(a)(12) of the IRC. However, § 108(f) provides that in certain instances, student loan cancellation and student loan repayment assistance may be excluded from gross income as otherwise would be required.

Cancelled or forgiven student loan debt may be excluded from gross income under § 108(f) if the relevant student loan contains terms providing that some or all of the loan will be cancelled for work for a specified period of time, in certain professions or occupations, and for any of a broad class of employers; and if it was made by specified types of lenders. Specified lenders are the government (federal, State, local, or an instrumentality, agency, or subdivision thereof); tax-exempt public benefit corporations that have assumed control of a State, county, or municipal hospital and whose

employees are considered public employees under State law; and educational organizations if the loan is made under an agreement with an entity described above, or under a program of the organization designed to encourage students to serve in occupations or areas with unmet needs and under the direction of a governmental entity or a tax-exempt § 501(c)(3) organization.

Student loans may be broadly categorized as either federal student loans or non-federal student loans. The three major federal student loan programs are the Federal Family Education Loan (FFEL) program, the William D. Ford Federal Direct Loan (DL) program, and the Federal Perkins Loan program. Student loans made under each of these programs contain terms which provide that if borrowers work for specified periods of time in certain professions, for certain broad classes of employers, all or a portion of their debt will be cancelled or forgiven. Examples include teacher loan forgiveness under the FFEL and DL programs, loan forgiveness for public service employees under the DL program, and loan cancellation for public service under the Federal Perkins Loan program. In addition, some non-federal loans also may be made with terms that meet the requirements of § 108(f) — for example, certain law school loan repayment assistance programs.

Federal student loans are made by different types of lenders. DL program loans are made directly by the federal government and thus, when forgiven for work in certain professions or occupations, the forgiven debt may be excluded from gross income. FFEL program loans are guaranteed by the federal government, but are made by a variety of lenders, including commercial banks, non-profit entities, and State entities. Many FFEL program lenders are not among the types specified in § 108(f). Nonetheless, the Department of the Treasury has determined that because of the government's role in guaranteeing FFEL program loans and in discharging borrowers' debt, as a matter of subrogation, these loans can reasonably be viewed as being made by the government.[21] Thus, when FFEL program loans are forgiven for work in certain professions or occupations, the forgiven debt may also be excluded from taxation. Under the Federal Perkins Loan program, loans are made by the public, non-profit, or for-profit postsecondary institutions that borrowers attend. The statute authorizing the Federal Perkins Loan program specifies that any part of a Federal Perkins Loan cancelled for certain types of public service shall not be considered income for purposes of the IRC (20 U.S.C. § 1087ee(a)(5)).

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[21] Eric Solomon, Assistant Secretary for Tax Policy, Department of the Treasury, "Letter to Honorable Sander Levin on the income tax treatment of student loans forgiven under the Higher Education Act," (Sep. 19, 2008).

Individuals may refinance existing student loans borrowed from any lender by obtaining new loans made by an educational or other tax-exempt organization for purposes of participating in a public service program of that organization designed to encourage students to serve in occupations or areas with unmet needs and which is under the direction of a governmental entity or a tax-exempt § 501(c)(3) organization.

Section 108(f) also excludes from income student loan repayment assistance provided under the National Health Service Corps (NHSC) Loan Repayment Program and State programs eligible to receive funds under the Public Health Service Act. These two programs provide payment on a borrower's behalf for principal, interest, and related expenses of educational loans in return for the borrower's service in a health professional shortage area. Government and commercial education loans are eligible to be repaid under the NHSC Loan Repayment Program.

Impact

Section 108(f) permits individuals to exclude cancelled or forgiven student loan debt; and payments under the NHSC and State loan repayment programs from their gross income. The benefit provided to any individual taxpayer and the corresponding loss of revenue to the federal government depends on the taxpayer's marginal tax rate. The extent to which individuals choose to finance the costs of their education by initially borrowing from or refinancing through specified types of lenders, and subsequently choose to enter certain professions, (e.g., public service, occupations with unmet need) because of available loan forgiveness or repayment programs and the favorable tax treatment of forgiven debt is not known.

Rationale

Whether to include the forgiveness of student loan debt or the repayment of debt through loan repayment assistance programs as part of gross income for purposes of taxation has been a policy issue for the past 50 years. Following the Supreme Court's decision in *Bingler v. Johnson* (1969), the primary issue in determining whether loan forgiveness and loan repayment programs are taxable has been whether there exists a *quid pro quo* between the recipient and the lender. Generally, if borrowers must perform service for the entity forgiving or repaying their loans, it is assumed that a *quid pro quo* exists and so the amount forgiven or repaid is treated as taxable income. The policy issue is whether the service borrowers provide in return for the discharge of their loan is for the benefit of the grantor of debt forgiveness and thus should be considered akin to income, or if the service is for the benefit of the broader society and thus should potentially be excluded from income. Following post-*Bingler v. Johnson* rulings by the IRS that had established the discharge of student loan indebtedness as taxable income,

Congress has periodically amended the IRC to override these rulings and specifically exclude the discharge of broader categories of certain student loan debt from taxation. As a result, the IRC currently provides tax treatment for qualified loan forgiveness and loan repayment programs that is similar to that of educational grants and scholarships, which are not taxable.

Assessment

The value to an individual of excluding the discharge of student loan indebtedness from gross income depends on that individual's marginal tax rate in the tax year in which the benefit is realized. Beneficiaries are required to be serving in certain types of professions or occupations, including occupations with unmet need, or that are in locations with unmet needs. Examples of loan forgiveness and repayment programs include those for employment as teachers, in public service jobs, in areas of national need, in health professional shortage areas; and law school loan repayment. In many instances, borrowers employed in these types of professions will be in lower tax brackets than if they had taken higher paying jobs elsewhere.

Section 108(f) was made applicable to payments received through the NHSC Loan Repayment Program under P.L. 108-357. Previously, the program provided loan repayment recipients with an additional payment for tax liability equal to 39% of the loan repayment amount (42 U.S.C. 254l-1(g)(3)). By excluding NHSC loan repayment from income, tax relief is now provided through forgone revenue as opposed to discretionary outlays.

Selected Bibliography

Beck, Richard C.E., "Loan Repayment Assistance Programs for Public-Interest Lawyers: Why Does Everyone Think They Are Taxable?" *New York Law School Law Review*, vol. 40, (1996): 251-310.

Bingler v. Johnson, 394 U.S. 741 (1969).

Boe, Caroleen C., "Cancelled Student Loans: For the Benefit of the Grantor?" *Albany Law Review*, vol. 39, (1974): 35-51.

Dauthtrey, Zoel, and Frank M. Messina, "Medical Student Loans: Making Repayments Tax Free," *The CPA Journal*, (Jan. 1999).

Internal Revenue Service, Revenue Ruling 73-256, State Medical Education Loan Scholarship Program, 1973-1 CB 56, (Jan. 01, 1973)

Philipps, J. Timothy, and Timothy G. Hatfield, "Uncle Sam Gets the Goldmine — Students Get the Shaft: Federal Tax Treatment of Student Loan Indebtedness," *Seton Hall Legislative Journal*, vol. 15, (1991): 249-296.

Moloney v. Commissioner of Internal Revenue, United States Tax Court, Summary Opinion 2006-53.

Oliver, Amy J., "Improving the Tax Code to Provide Meaningful and Effective Tax Incentives for Higher Education," *University of Florida Journal of Law & Public Policy*, vol. 12, (2000): 91-145.

Smole, David P., *Campus-Based Student Financial Aid Programs Under the Higher Education Act,* Library of Congress, Congressional Research Service, Washington, D.C., (2008).

Smole, David P., *Loan Forgiveness for Public Service Employees Under the William D. Ford Direct Loan Program,* Library of Congress, Congressional Research Service, Washington, D.C., (2008).

DEDUCTION FOR CHARITABLE CONTRIBUTIONS TO EDUCATIONAL INSTITUTIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	6.0	0.4	6.4
2009	6.3	0.4	6.7
2010	6.6	0.5	7.1
2011	7.0	0.5	7.5
2012	7.7	0.5	8.2

Authorization

Section 170 and 642(c).

Description

Subject to certain limitations, charitable contributions may be deducted by individuals, corporations, and estates and trusts. The contributions must be made to specific types of organizations, including scientific, literary, or educational organizations.

Individuals who itemize may deduct qualified contribution amounts of up to 50 percent of their adjusted gross income (AGI) and up to 30 percent for gifts of capital gain property. For contributions to nonoperating foundations and organizations, deductibility is limited to the lesser of 30 percent of the taxpayer's contribution base, or the excess of 50 percent of the contribution base for the tax year over the amount of contributions which qualified for the 50-percent deduction ceiling (including carryovers from previous years). Gifts of capital gain property to these organizations are limited to 20 percent of AGI.

The maximum amount deductible by a corporation is 10 percent of its adjusted taxable income. Adjusted taxable income is defined to mean taxable income with regard to the charitable contribution deduction, dividends-received deduction, any net operating loss carryback, and any capital loss carryback. Excess contributions may be carried forward for five years. Amounts carried forward are used on a first-in, first-out basis after the deduction for the current year's charitable gifts have been taken. Typically, a deduction is allowed only in the year in which the contribution occurs. However, an accrual-basis corporation is allowed to claim a deduction in the year preceding payment if its board of directors authorizes a charitable gift during the year and payment is scheduled by the 15th day of the third month of the next tax year.

If a contribution is made in the form of property, the deduction depends on the type of taxpayer (*i.e.*, individual, corporate, etc.), recipient, and purpose.

As a result of the enactment of the American Jobs Creation Act of 2004, P.L. 108-357, donors of noncash charitable contributions face increased reporting requirements. For charitable donations of property valued at $5,000 or more, donors must obtain a qualified appraisal of the donated property. For donated property valued in excess of $500,000, the appraisal must be attached to the donor's tax return. Deductions for donations of patents and other intellectual property are limited to the lesser of the taxpayer's basis in the donated property or the property's fair market value. Taxpayers can claim additional deductions in years following the donation based on the income the donated property provides to the donee. The 2004 act also mandated additional reporting requirements for charitable organizations receiving vehicle donations from individuals claiming a tax deduction for the contribution, if it is valued in excess of $500.

Taxpayers are required to obtain written substantiation from a donee organization for contributions that exceed $250. This substantiation must be received no later than the date the donor-taxpayer files the required income tax return. Donee organizations are obligated to furnish the written acknowledgment when requested with sufficient information to substantiate the taxpayer's deductible contribution.

The Pension Protection Act of 2006 (P.L. 109-280) included several provisions that temporarily expand charitable giving incentives. The provisions, effective after December 31, 2005 and before January 1, 2008, include enhancements to laws governing non-cash gifts and tax-free distributions from individual retirement plans for charitable purposes. The 2006 law also tightened rules governing charitable giving in certain areas, including gifts of taxidermy, contributions of clothing and household items, contributions of fractional interests in tangible personal property, and record-keeping and substantiation requirements for certain charitable contributions. Temporary charitable giving incentives were further extended by the

Economic Emergency Economic Stabilization Act of 2008 (P.L. 110-343) enacted in October 2008.

Impact

The deduction for charitable contributions reduces the net cost of contributing. In effect, the federal government provides the donor with a corresponding grant that increases in value with the donor's marginal tax bracket. Those individuals who use the standard deduction or who pay no taxes receive no benefit from the provision.

A limitation applies to the itemized deductions of high-income taxpayers. Under this provision, initially a phaseout applied which reduced itemized deductions by 3 percent of the amount by which a taxpayer's adjusted gross income (AGI) exceeds an inflation adjusted dollar amount ($166,800 in 2009). This phase out is, in turn being phased out, and in 2009 is reduced by two thirds. It is eliminated in 2010, but after that year the elimination of the phaseout expires, unless extended. The table below provides the distribution of all charitable contributions, not just those to educational organizations.

Distribution by Income Class of the Tax Expenditure for Charitable Contributions, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	0.1
$20 to $30	0.3
$30 to $40	0.8
$40 to $50	1.6
$50 to $75	6.6
$75 to $100	8.0
$100 to $200	27.5
$200 and over	55.2

Before the 2004 enactment, donors could deduct the fair market value of donations of intellectual property. The new restrictions may result in fewer such donations to universities and other qualified institutions. The need to account for any increased income attributable to the donation might involve more work for recipient institutions.

Rationale

This deduction was added by passage of the War Revenue Act of October 3, 1917. Senator Hollis, the sponsor, argued that high wartime tax rates would absorb the surplus funds of wealthy taxpayers, which were generally contributed to charitable organizations.

It was also argued that many colleges would lose students to the military and charitable gifts were needed by educational institutions. Thus, the original rationale shows a concern for educational organizations. The deduction was extended to estates and trusts in 1918 and to corporations in 1935.

The provisions enacted in 2004 resulted from Internal Revenue Service and congressional concerns that taxpayers were claiming inflated charitable deductions, causing significant federal revenue loss. In the case of patent and other intellectual property donations, the IRS expressed concern not only about overvaluation of property, but also whether consideration was received in return for the donation and whether only a partial interest, rather than full interest, of property was being transferred. The 2006 enactments were, in part, a result of continued concerns from 2004.

Assessment

Most economists agree that education produces substantial "spillover" effects benefitting society in general. Examples include a more efficient workforce, lower unemployment rates, lower welfare costs, and less crime. An educated electorate fosters a more responsive and effective government. Since these benefits accrue to society at large, they argue in favor of the government actively promoting education.

Further, proponents argue that the Federal government would be forced to assume some activities now provided by educational organizations if the deduction were eliminated. However, public spending might not be available to make up all the difference. Also, many believe that the best method of allocating general welfare resources is through a dual system of private philanthropic giving and governmental allocation.

Economists have generally held that the deductibility of charitable contributions provides an incentive effect which varies with the marginal tax rate of the giver. There are a number of studies which find significant behavioral responses, although a study by Randolph suggests that such measured responses may largely reflect transitory timing effects.

Types of contributions may vary substantially among income classes. For example, contributions to religious organizations are far more concentrated at the lower end of the income scale than contributions to educational

institutions. More highly valued contributions, like intellectual property and patents, tend to be made by corporations to educational institutions.

It has been estimated by the American Association of Fund-Raising Counsel Trust for Philanthropy, Inc. that giving to public and private colleges, universities, elementary schools, secondary schools, libraries, and to special scholarship funds, nonprofit trade schools, and other educational facilities amounted to $38.56 billion in calendar year 2005.

Opponents say that helping educational organizations may not be the best way to spend government money. Opponents further claim that the present system allows wealthy taxpayers to indulge special interests (such as gifts to their alma mater).

To the extent that charitable giving is independent of tax considerations, federal revenues are lost without any corresponding increase in charitable gifts. It is generally argued that the charitable contributions deduction is difficult to administer and adds complexity to the tax code.

Selected Bibliography

Aprill, Ellen P. "Churches, Politics, and the Charitable Contribution Deduction," *Boston College Law Review*, v. 42 (July 2001), pp. 843-873.

Arnone, Michael. "Congress Approves Lower Tax Benefits for Donations of Intellectual Property," *Chronicle of Higher Education*, v. 51, iss. 9, October 22, 2004, p. A36.

Boatsman, James R. and Sanjay Gupta, "Taxes and Corporate Charity: Empirical Evidence from Micro-Level Panel Data," *National Tax Journal*, Vol. 49, June 1996, pp. 193-213.

Broman, Amy J. "Statutory Tax Rate Reform and Charitable Contributions: Evidence from a Recent Period of Reform," *Journal of the American Taxation Association*. Fall 1989, pp. 7-21.

Giving USA 2006, The Annual Report on Philanthropy for the Year 2005, The Center on Philanthropy At Indiana University. Indiana University-Purdue University, Indianapolis: 2006.

Buckles, Johnny Rex. "The Case for the Taxpaying Good Samaritan: Deducting Earmarked Transfers to Charity Under Federal Income Tax Law, Theory and Policy," *Fordham Law Review*, v. 70 (March 2002), pp. 1243-1339.

"Bush Signs Corporate Tax Legislation Restricting Donations of Intellectual Property," *Higher Education and National Affairs*, October 27, 2004.

Crimm, Nina J. "An Explanation of the Federal Income Tax Exemption for Charitable Organizations: A Theory of Risk Compensation," *Florida Law Review*, v. 50 (July 1998), pp. 419-462.

Clotfelter, Charles T. "The Impact of Tax Reform on Charitable Giving: A 1989 Perspective." In *Do Taxes Matter? The Impact of the Tax Reform Act of 1986*, edited by Joel Slemrod, Cambridge, Mass.: MIT Press, 1990.

— . "The Impact of Fundamental Tax Reform on Nonprofit Organizations." In *Economic Effects of Fundamental Tax Reform*, Eds. Henry J. Aaron and William G. Fale. Washington, DC: Brookings Institution Press, 1996, pp. 211-246.

Colombo, John D. "The Marketing of Philanthropy and the Charitable Contributions Deduction: Integrating Theories for the Deduction and Tax Exemption," *Wake Forest Law Review*, v. 36 (Fall 2001), pp. 657-703.

Feenberg, Daniel. "Are Tax Price Models Really Identified: The Case of Charitable Giving," *National Tax Journal*, v. 40, (December 1987), pp. 629-633.

Feldman, Naomi and James Hines, Jr. "Tax Credits and Charitable Contributions in Michigan," University of Michigan, Working Paper, October 2003.

Fisher, Linda A. "Donor-Advised Funds: The Alternative to Private Foundations," *Cleveland Bar Journal*, v. 72 (July/August 2001), pp. 16-17.

Gravelle, Jane. *Economic Analysis of the Charitable Contribution Deduction for Nonitemizers*, Library of Congress Congressional Research Service Report RL31108, April 29, 2005.

-. Tax Issues Relating to Charitable Contributions and Organizations, Library of Congress, Congressional Research Service report RL34608, August 5, 2008.

Green, Pamela and Robert McClelland. "Taxes and Charitable Giving," *National Tax Journal*, v. 54 (September 2001), pp. 433-450.

Hasselback, James R. and Rodney L. Clark. "Colleges, Commerciality, and the Unrelated Business Income Tax." *Taxes*, v. 74 (May 1996), pp. 335-342.

Jones, Darryll K. "When Charity Aids Tax Shelters," *Florida Tax Review*, v. 4 (2001), pp. 770-830.

Joulfaian, David and Mark Rider. "Errors-In-Variables and Estimated Income and Price Elasticities of Charitable Giving," *National Tax Journal*, v. 57 (March 2004), pp. 25-43.

Kahn, Jefferey H. "Personal Deductions: A Tax "Ideal" or Just Another "Deal"?," *Law Review of Michigan State University*, v. 2002 (Spring 2002), pp. 1-55.

Lankford, R. Hamilton and James H. Wyckoff. "Modeling Charitable Giving Using a Box-Cox Standard Tobit Model," *Review of Economics and Statistics*, v. 73 (August 1991), pp. 460-470.

Omer, Thomas C. "Near Zero Taxable Income Reporting by Nonprofit Organizations," *Journal of American Taxation Association*, v. 25, Fall 2003, pp. 19-34.

Randolph, William C. "Charitable Deductions," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

— . "Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions," *Journal of Political Economy*, v. 103, August 1995, pp. 709-738.

Rose-Ackerman, Susan. "Altruism, Nonprofits, and Economic Theory," *Journal of Economic Literature*, v. 34 (June 1996), pp. 701-728.

Stokeld, Fred, "ETI Repeal Bill Would Tighten Rules on Vehicle, Patent Donations," *Tax Notes*, October 18, 2004, pp. 293-294.

"Tax Exempt Educational Organizations," *Journal of Law and Education*, v. 15. Summer 1986, pp. 341-346.

Teitell, Conrad. "Tax Primer on Charitable Giving," *Trust & Estates*, v. 139, (June 2000), pp. 7-16.

Tiehen, Laura. "Tax Policy and Charitable Contributions of Money," *National Tax Journal*, v. 54 (December 2001), pp. 707-723.

Tobin, Philip T. "Donor Advised Funds: A Value-Added Tool for Financial Advisors," *Journal of Practical Estate Planning*, v. 3 (October/November 2001), pp. 26-35, 52.

U.S. Congress, Congressional Budget Office. Budget Options. See Rev-12, Limit Deductions for Charitable Giving to the Amount Exceeding 2 Percent of Adjusted Gross Income. Washington, DC: Government Printing Office (February 2005), p 281.

U.S. Congress, General Accounting Office. *Vehicle Donations: Benefits to Charities and Donors, but Limited Program Oversight*, GAO Report GAO-04-73, Washington, DC: U.S. General Accounting Office. November 2003, pp. 1-44.

— . *Vehicle Donations: Taxpayer Considerations When Donating Vehicles to Charities,* GAO Report GAO-03-608T, Washington, DC: U.S. General Accounting Office. April 2003, pp. 1-15.

U.S. Congress, Joint Committee on Taxation, *Technical Explanation Of H.R. 4, The "Pension Protection Act Of 2006,"* as Passed by the House on July 28, 2006, and as Considered by the Senate on August 3, 2006, JCX-38-06, Washington, DC: U.S. Government Printing Office, August 3, 2006, pp. 1-386.

—, Senate Committee on Finance. *Staff Discussion Draft: Proposals for Reforms and Best Practices in the Area of Tax-Exempt Organization*s, Washington, DC, June 22, 2004, pp. 1-19.

U.S. Department of Treasury. "Charitable Giving Problems and Best Practices," *testimony given by Mark Everson, Commissioner of Internal Revenue*, Internal Revenue Service, IR-2004-81, June 22, 2004, pp. 1-17.

Wittenbach, James L. and Ken Milani. "Charting the Interacting Provisions of the Charitable Contributions Deductions for Individuals," *Taxation of Exempts*, v. 13 (July/August 2001), pp. 9-22.

— , "Charting the Provisions of the Charitable Contribution Deduction for Corporations," *Taxation of Exempts*, v. 13 (November/December 2001), pp. 125-130.

Yetman, Michelle H. and Robert J. Yetman. "The Effect of Nonprofits' Taxable Activities on the Supply of Private Donations," *National Tax Journal*, v. 56, March 2003, pp. 243-258.

Zimmerman, Dennis. "Nonprofit Organizations, Social Benefits, and Tax Policy," *National Tax Journal,* v. 44. September 1991, pp. 341-349.

SPECIAL TAX PROVISIONS FOR EMPLOYEE STOCK OWNERSHIP PLANS (ESOPs)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.5	0.9	1.4
2009	0.5	1.0	1.5
2010	0.5	1.1	1.6
2011	0.5	1.2	1.7
2012	0.5	1.2	1.7

Authorization

Sections 133, 401(a)(28), 404(a)(9), 404(k), 415(c)(6), 1042, 4975(e)(7), 4978, 4979A

Description

An employee stock ownership plan (ESOP) is a defined-contribution plan that is required to invest primarily in the stock of the sponsoring employer. ESOPs are unique among employee benefit plans in their ability to borrow money to buy stock. An ESOP that has borrowed money to buy stock is a leveraged ESOP. An ESOP that acquires stock through direct employer contributions of cash or stock is a nonleveraged ESOP.

ESOPs are provided with various tax advantages. Employer contributions to an ESOP may be deducted by the employer as a business expense. Contributions to a leveraged ESOP are subject to less restrictive limits than contributions to other qualified employee benefit plans.

An employer may deduct dividends paid on stock held by an ESOP if the dividends are paid to plan participants, if the dividends are used to repay a

loan that was used to buy the stock, or for dividends paid on stock in a retirement plan. The deduction for dividends used to repay a loan is limited to dividends paid on stock acquired with that loan. Employees are not taxed on employer contributions to an ESOP or the earnings on invested funds until they are distributed.

A stockholder in a closely held company may defer recognition of the gain from the sale of stock to an ESOP if, after the sale, the ESOP owns at least 30 percent of the company's stock and the seller reinvests the proceeds from the sale of the stock in a U.S. company.

To qualify for these tax advantages, an ESOP must meet the minimum requirements established in the Internal Revenue Code. Many of these requirements are general requirements that apply to all qualified employee benefit plans. Other requirements apply specifically to ESOPs.

In particular, ESOP participants must be allowed voting rights on stock allocated to their accounts. In the case of publicly traded stock, full voting rights must be passed through to participants. For stock in closely held companies, voting rights must be passed through on all major corporate issues.

Closely held companies must give employees the right to sell distributions of stock to the employer (a put option), at a share price determined by an independent appraiser. An ESOP must allow participants who are approaching retirement to diversify the investment of funds in their accounts.

Impact

The various ESOP tax incentives encourage employee ownership of stock through a qualified employee benefit plan and provide employers with a tax-favored means of financing. The deferral of recognition of the gain from the sale of stock to an ESOP encourages the owners of closely held companies to sell stock to the company's employees. The deduction for dividends paid to ESOP participants encourages the current distribution of dividends.

Various incentives encourage the creation of leveraged ESOPs. Compared to conventional debt financing, both the interest and principal on an ESOP loan are tax-deductible. The deduction for dividends used to make payments on an ESOP loan and the unrestricted deduction for contributions to pay interest encourage employers to repay an ESOP loan more quickly.

According to an analysis of information returns filed with the Internal Revenue Service, most ESOPs are in private companies, and most ESOPs have fewer than 100 participants. But most ESOP participants are employed by public companies and belong to plans with 100 or more participants.

Likewise, most ESOP assets are held by plans in public companies and by plans with 100 or more participants.

Rationale

The tax incentives for ESOPs are intended to broaden stock ownership, provide employees with a source of retirement income, and grant employers a tax-favored means of financing.

The Employee Retirement Income Security Act of 1974 (P.L. 93-406) allowed employers to form leveraged ESOPs. The Tax Reduction Act of 1975 established a tax-credit ESOP (called a TRASOP) that allowed employers an additional investment tax credit of one percentage point if they contributed an amount equal to the credit to an ESOP.

The Tax Reform Act of 1976 allowed employers an increased investment tax credit of one-half a percentage point if they contributed an equal amount to an ESOP and the additional contribution was matched by employee contributions.

The Revenue Act of 1978 required ESOPs in publicly traded corporations to provide participants with full voting rights, and required closely held companies to provide employees with voting rights on major corporate issues. The Act required closely held companies to give workers a put option on distributions of stock.

The Economic Recovery Tax Act of 1981 (P.L. 97-34) replaced the investment-based tax credit ESOP with a tax credit based on payroll (called a PAYSOP). The 1981 Act also allowed employers to deduct contributions of up to 25 percent of compensation to pay the principal on an ESOP loan. Contributions used to pay interest on an ESOP loan were excluded from the 25-percent limit.

The Deficit Reduction Act of 1984 (P.L. 98-369) allowed corporations a deduction for dividends on stock held by an ESOP if the dividends were paid to participants. The Act also allowed lenders to exclude from their income 50 percent of the interest they received on loans to an ESOP.

The Act allowed a stockholder in a closely held company to defer recognition of the gain from the sale of stock to an ESOP if the ESOP held at least 30 percent of the company's stock and the owner reinvested the proceeds from the sale in a U.S. company. The Act permitted an ESOP to assume a decedent's estate tax in return for employer stock of equal value.

The Tax Reform Act of 1986 repealed the tax credit ESOP. The Act also extended the deduction for dividends to include dividends used to repay an ESOP loan. The Act permitted an estate to exclude from taxation up to 50

percent of the proceeds from the sale of stock to an ESOP. The Act allowed persons approaching retirement to diversify the investment of assets in their accounts.

The Omnibus Budget Reconciliation Act of 1989 limited the 50-percent interest exclusion to loans made to ESOPs that hold more than 50 percent of a company's stock. The deduction for dividends used to repay an ESOP loan was restricted to dividends paid on shares acquired with that loan. The Act repealed both estate tax provisions: the exclusion allowed an estate for the sale of stock to an ESOP and the provision allowing an ESOP to assume a decedent's estate tax. The Small Business Job Protection Act of 1996 eliminated the provision that allowed a 50% interest income exclusion for bank loans to ESOPs. The Economic Growth and Recovery Tax Act of 2001 allowed firms to deduct dividends on stock held in retirement plans.

Assessment

One of the major objectives of ESOPs is to expand employee stock ownership. These plans are believed to motivate employees by more closely aligning their financial interests with the financial interests of their employers. The distribution of stock ownership in ESOP firms is broader than the distribution of stock ownership in the general population.

Some evidence suggests that among firms with ESOPs there is a greater increase in productivity if employees are involved in corporate decision-making. But employee ownership of stock is not a prerequisite for employee participation in decision-making.

ESOPs do not provide participants with the traditional rights of stock ownership. Full vesting depends on a participant's length of service and distributions are generally deferred until a participant separates from service. To provide participants with the full rights of ownership would be consistent with the goal of broader stock ownership, but employees would be able to use employer contributions for reasons other than retirement.

The requirement that ESOPs invest primarily in the stock of the sponsoring employer is consistent with the goal of corporate financing, but it may not be consistent with the goal of providing employees with retirement income. The cost of such a lack of diversification was demonstrated with the failure of Enron and other firms whose employees' retirement plans were heavily invested in company stock. If a firm experiences financial difficulties, the value of its stock and its dividend payments will fall. Furthermore, employee ownership firms do fail with not only the consequent loss of a jobs but also the employees' ownership stakes. Because an ESOP is a defined-contribution plan, participants bear the burden of this risk. The partial diversification requirement for employees approaching retirement was enacted in response to this issue.

A leveraged ESOP allows an employer to raise capital to invest in new plant and equipment. But evidence suggests that the majority of leveraged ESOPs involve a change in ownership of a company's stock, and not a net increase in investment.

Although the deduction for dividends used to repay an ESOP loan may encourage an employer to repay a loan more quickly, it may also encourage an employer to substitute dividends for other loan payments.

Because a leveraged ESOP allows an employer to place a large block of stock in friendly hands, leveraged ESOPs have been used to prevent hostile takeovers. In these cases, the main objective is not to broaden employee stock ownership.

ESOPs have been used in combination with other employee benefit plans. A number of employers have adopted plans that combine an ESOP with a 401(k) salary reduction plan. Some employers have combined an ESOP with a 401(h) plan to fund retiree medical benefits.

Selected Bibliography

Blasi, Joseph R. *Employee Ownership: Revolution or Ripoff*? Cambridge, MA: Ballinger, 1988.

Blinder, Alan S., ed. *Paying for Productivity: A Look at the Evidence*. Washington, DC: The Brookings Institution, 1990.

Conte, Michael A., and Helen H. Lawrence. "Trends in ESOPs," *Trends in Pensions 1992*, eds. John A. Turner and Daniel J. Beller. Washington, DC: U.S. Government Printing Office, 1992, pp. 135-148.

Gamble, John E. "ESOPs: Financial Performance and Federal Tax Incentives," *Journal of Labor Research*, v. 19, Summer 1998, pp. 529-541.

Gravelle, Jane G., *Employer Stock in Pension Plans: Economic and Tax Issues*, Library of Congress, Congressional Research Service Report RL31551,Washongton, DC: September 4, 2002.

—. "The Enron Debate: Lessons for Tax Policy," Urban-Brookings Tax Policy Center Discussion Paper 6, Washington, DC: The Urban Institute, February 2003.

Kruse, Douglas, Richard Freeman, Joseph Blasi, Robert Buchele, and Adria Scharf, "Motivating Employee-Owners in ESOP Firms: Human Resource Policies and Company Performance," in *Employee Participation, Firm Performance and Survival, Advances in the Economic Analysis of Participatory and Labor-Managed Firms*, v. 8, Virginie Perotin and Andrew Robinson, eds., Amsterdam: Elsevier, 2004.

Mayer, Gerald. "Employee Stock Ownership Plans," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Snyder, Todd S., *Employee Stock Ownership Plans (ESOPs): Legislative History*. Library of Congress, Congressional Research Service Report RS21526, Washington, DC: May 20, 2003.

U.S. General Accounting Office. *Employee Stock Ownership Plans: Benefits and Costs of ESOP Tax Incentives for Broadening Stock Ownership*, PEMD-87-8. Washington, DC: General Accounting Office, December 29, 1986.

— . *Employee Stock Ownership Plans: Little Evidence of Effects on Corporate Performance*, PEMD-88-1. Washington, DC: General Accounting Office, October 29, 1987.

EXCLUSION OF EMPLOYEE AWARDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	-	0.2
2009	0.2	-	0.2
2010	0.2	-	0.2
2011	0.2	-	0.2
2012	0.2	-	0.2

Authorization

Sections 74(c), 274(j).

Description

Generally, prizes and awards to employees that do not qualify as a de minimis fringe benefit under Section 132(e) are taxable to the employee. Section 74(c), however, provides an exclusion for certain awards of tangible personal property given to employees for length of service or for safety achievement.

The amount of the exclusion (under subsection 74(c)) for the employee is the value of the property awarded, and is generally limited by the employer's deduction for the award (under Section 274(j)) — $400, or up to $1,600 for awards granted as part of qualified employee achievement award plans. Qualified employee achievement plans are established or written employer programs which do not discriminate in favor of highly compensated employees. In addition, the average cost per recipient of all awards granted under all established plans for an employer cannot exceed $400.

For employees of non-profit employers, the amount of the exclusion is the amount that would have been allowed if the employer were taxable (non-profit organizations are generally not subject to federal income taxes) - $400, and up to $1,600 if the non-profit employer has a qualified employee achievement award plan.

Generally, the limitation on the exclusion for the employee is the cost to (and deduction for) the employer related to the award. If however both the cost to the employer for the award and the fair market value of the award exceed the limitation, the employee must include the excess (fair market value minus the limitation) in gross income.

Length of service awards which qualify for the exclusion (and the employer deduction of cost), cannot be awarded to an employee in the first five years of service, or to an employee who has received a length of service award (other than an award excluded as a de minimis fringe benefit under Section 132(e)) in that year or any of the prior four years of service. Awards for safety achievement (other than an award excluded as a de minimis fringe benefit under Section 132(e)) which qualify for the exclusion (and the employer deduction of cost) cannot be awarded to a manager, administrator, clerical employee, or other professional employee. In addition, awards for safety achievement cannot have been awarded, in that year, to more than 10% of employees.

The amount of an eligible employee award which is excluded from gross income is also excluded under the Federal Insurance Contributions Act (FICA) for Social Security and Medicare taxes (Old Age, Survivors and Disability tax and Hospital tax).

Impact

Sections 74(c) and 274(j) exclude from gross income certain employee awards of tangible personal property for length of service and safety achievement that would otherwise be taxable.

Rationale

The exclusion for certain employee awards was adopted in the Tax Reform Act of 1986. Prior to that Act, with exceptions that were complex and difficult to interpret, awards received by employees generally were taxable.

Assessment

The exclusion recognizes a traditional business practice which may have social benefits. The combination of the limitation on the exclusion as to eligibility for qualifying awards, and the dollar amount of the exclusion not being increased since 1986, keep the exclusion from becoming a vehicle for significant tax avoidance. However, the lack of an increase in the exclusion effectively reduces the tax-free portion of some awards.

Selected Bibliography

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986*, 100th Congress, 1st session. May 4, 1987, pp. 30-38.

Education, Training, Employment, and Social Services:
Employment

EXCLUSION OF EMPLOYEE MEALS AND LODGING (OTHER THAN MILITARY)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.9	-	0.9
2009	1.0	-	1.0
2010	1.0	-	1.0
2011	1.0	-	1.0
2012	1.1	-	1.1

Authorization

Sections 119 and 132(e)(2).

Description

Employees do not include in income the fair market value of meals furnished by employers if the meals are furnished on the employer's business premises and for the convenience of the employer.

The fair market value of meals provided to an employee at a subsidized eating facility operated by the employer is also excluded from income, if the facility is located on or near the employer's business, and if revenue from the facility equals or exceeds operating costs. In the case of highly compensated employees, certain nondiscrimination requirements are met to obtain this second exclusion.

Section 119 also excludes from an employee's gross income the fair market value of lodging provided by the employer, if the lodging is furnished

on business premises for the convenience of the employer, and if the employee is required to accept the lodging as a condition of employment.

Impact

Exclusion from taxation of meals and lodging furnished by an employer provides a subsidy to employment in those occupations or sectors in which such arrangements are common. Live-in housekeepers or apartment resident managers, for instance, may frequently receive lodging and/or meals from their employers. The subsidy provides benefits both to the employees (more are employed and they receive higher compensation) and to their employers (who receive the employees' services at lower cost).

Rationale

The convenience-of-the-employer exclusion now set forth in section 119 generally has been reflected in income tax regulations since 1918, presumably in recognition of the fact that in some cases, the fair market value of employer-provided meals and lodging may be difficult to measure.

The specific statutory language in section 119 was adopted in the 1954 Code to clarify the tax status of such benefits by more precisely defining the conditions under which meals and lodging would be treated as tax free.

In enacting the limited exclusion for certain employer-provided eating facilities in the 1984 Act, the Congress recognized that the benefits provided to a particular employee who eats regularly at such a facility might not qualify as a *de minimis* fringe benefit absent another specific statutory exclusion. The record-keeping difficulties involved in identifying which employees ate what meals on particular days, as well as the values and costs for each such meal, led the Congress to conclude that an exclusion should be provided for subsidized eating facilities as defined in section 132(e)(2).

Assessment

The exclusion subsidizes employment in those occupations or sectors in which the provision of meals and/or lodging is common. Both the employees and their employers benefit from the tax exclusion. Under normal market circumstances, more people are employed in these positions than would otherwise be the case and they receive higher compensation (after tax). Their employers receive their services at lower cost. Both sides of the transaction benefit because the loss is imposed on the U.S. Treasury in the form of lower tax collections.

Because the exclusion applies to practices common only in a few occupations or sectors, it introduces inequities in tax treatment among different employees and employers.

While some tax benefits are conferred specifically for the purpose of providing a subsidy, this one ostensibly was provided for administrative reasons (based on the difficulty in determining their fair market value), and the benefits to employers and employees are side effects. Some observers challenge the argument that administrative problems are an adequate rationale for excluding employer-provided meals and lodging. They note that a value is placed on these services under some Federal and many State welfare programs.

Selected Bibliography

Katz, Avery, and Gregory Mankiw. "How Should Fringe Benefits Be Taxed?" *National Tax Journal*. v. 38. March 1985, pp. 37-46.

Kies, Kenneth J. "Analysis of the New Rules Governing the Taxation of Fringe Benefits," *Tax Notes*. September 3, 1984, pp. 981-988.

Layne, Jonathan Keith. "Cash Meal Allowances Are Includible in Gross Income and Are Not Excludible Under I.R.C. Section 119 as That Section Permits an Exclusion Only for Meals Furnished in Kind," *Emory Law Review*. Summer 1978, pp. 791-814.

Raby, Burgess J. W. and William L. Raby. "'Will Work for Food!': Room Meals, and 'Convenience of the Employer,'" *Tax Notes*, Vol. 100, July 14, 2003, pp. 203-205.

Sunley, Emil M., Jr. "Employee Benefits and Transfer Payments," *Comprehensive Income Taxation*, ed. Joseph A. Pechman. Washington, DC: The Brookings Institution, 1977, pp. 90-92.

Turner, Robert. "Fringe Benefits," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Committee Print, 98th Congress, 2nd session. December 31, 1984, pp. 858-859.

DEFERRAL OF TAXATION ON SPREAD ON ACQUISITION OF STOCK UNDER INCENTIVE STOCK OPTION PLANS AND EMPLOYEE STOCK PURCHASE PLANS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.4	-1.1	-0.7
2009	0.4	-1.1	-0.7
2010	0.4	-1.1	-0.7
2011	0.4	-1.3	-0.9
2012	0.3	-1.3	-1.0

Authorization

Sections 422-423.

Description

Qualified (or "statutory") options include "incentive stock options," which are limited to $100,000 a year for any one employee, and "employee stock purchase plans," which are limited to $25,000 a year for any employee. Employee stock purchase plans must be offered to all full-time employees with at least two years of service; incentive stock options may be confined to officers and highly paid employees. Qualified options are not taxed to the employee when granted or exercised (under the regular tax); tax is imposed only when the stock is sold. If the stock is held one year from purchase and two years from the granting of the option, the gain is taxed as a long-term capital gain. The employer is not allowed a deduction for these options, which requires the employer to pay higher income taxes. However, if the stock is not held the required time, the employee is taxed at ordinary income tax rates and the employer is allowed a deduction. The value of incentive

stock options is included in minimum taxable income for the alternative minimum income tax in the year of exercise.

Impact

Both types of qualified stock options provide employees with tax benefit under current law. The employee recognizes no income (for regular tax purposes) when the options are granted or when they are exercised. Taxes (under the regular tax) are not imposed until the stock purchased by the employee is sold. If the stock is sold after it has been held for at least two years from the date the option was granted *and* one year from the date it was exercised, the difference between the market price of the stock when the option was exercised and the price for which it was sold is taxed at long-term capital gains rates. If the option price was less than 100% of the fair market value of the stock when it was granted, the difference between the exercise price and the market price (the discount) is taxed as ordinary income (when the stock is sold). Taxpayers with above average or high incomes are the primary beneficiaries of these tax advantages. Because employers (usually corporations) cannot deduct the cost of stock options eligible for the lower tax rate on long-term capital gains, employers pay higher income taxes. The prevailing view of tax economists is that the corporate income tax falls primarily on shareholders. Because most corporate stock is owned by high income households, these households bear the incidence of this aspect of stock options. These conflicting effects on incidence mean that the overall incidence of qualified stock options is uncertain.

Rationale

The Revenue Act of 1964 (P.L. 88-272) enacted special rules for qualified stock options, which excluded these options from income when they were granted or exercised and instead included the gains as income at the time of sale of the stock. The Tax Reform Act of 1976 (P.L. 94-455) repealed these special provisions and thus subjected qualified stock options to the same rules as applied to nonqualified options. Therefore, if an employee receives an option, which has a readily ascertainable fair market value at the time it is granted, this value (less the option price paid for the option, if any) constituted ordinary income to the employee at that time. But, if the option did not have a readily ascertainable fair market value at the time it was granted, the value of the option did not constitute ordinary income to the employee at that time. However, when the option was exercised, the spread between the option price and the value of the stock constituted ordinary income to the employee. The Economic Recovery Tax Act of 1981 (P.L. 97-34) reinstituted special rules for qualified stock options with the justification that encouraging the management of a business to have a proprietary interest in its successful operation would provide an important incentive to expand and improve the profit position of the companies involved.

The Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66) established code section 162(m), titled "Certain Excessive Employee Remuneration," which applied to the Chief Executive Officer (CEO) and the four highest compensated officers (other than the CEO) of a publicly held corporation. For each of these "covered employees," the publicly held corporation could only deduct, as an expense, the first $1 million of applicable remuneration. The reason for this change was that "the committee [House Committee on the Budget] believes that excessive compensation will be reduced if the deduction for compensation ... paid to the top executives of publicly held corporations is limited to $1 million per year." Exceptions to this $1 million in applicable remuneration included (1) "remuneration payable on commission basis" and (2) "other performance-based compensation." Economic theory suggests that the $1 million cap on deductible compensation increased the relative importance of performance-related compensation including stock options.

Assessment

Tax advantages for qualified stock options may encourage some companies to provide them to employees rather than other forms of compensation that are not tax favored. Paying for the services of employees, officers, and directors by the use of stock options has several advantages for the companies. Start-up companies often use the method because it does not involve the immediate cash outlays that paying salaries involves; in effect, a stock option is a promise of a future payment, contingent on increases in the value of the company's stock. It also makes the employees' pay dependent on the performance of the company's stock, giving them extra incentive to try to improve the company's (or at least the stock's) performance. Ownership of company stock is thought by many to assure that the company's employees, officers, and directors share the interests of the company's stockholders. Lastly, receiving pay in the form of stock options serves as a form of forced savings, since the money cannot be spent until the restrictions expire.

Critics of the stock options, however, argue that there is no real evidence that the use of stock options instead of cash compensation improves corporate performance. (Many of the leading users of stock options were among the companies suffering substantial recent stock losses.) Furthermore, stock options are a risky form of pay, since the market value of the company's stock may decline rather than increase. Some employees may not want to make the outlays required to buy the stock, especially if the stock is subject to restrictions and cannot be sold immediately. And some simply may not want to invest their pay in their employer's stock. Critics also assert that the aggregate dollar amount of the benefits to employees is less than the aggregate dollar amount of the cost to employers (primarily corporations).

Selected Bibliography

Bickley, James M. *Employee Stock Options: Tax Treatment and Tax Issues.* Library of Congress, Congressional Research Service Report RL31458. Washington, DC: updated May 7, 2008.

Gravelle, Jane G. *Taxes and Incentive Stock Options*. Library of Congress, Congressional Research Service Report RS20874. Washington, DC: January 30, 2003.

Bickley, James M. and Gary Shorter. *Stock Options: The Backdating Issue*. Library of Congress, Congressional Research Service Report RL33926. Washington, DC: updated January 2, 2008.

Johnson, Shane A. and Yisong S. Tian. "The Value and Incentive Effects of Nontraditional Executive Stock Option Plans." *Journal of Financial Economics*, vol. 57 (2000), pp. 3-34.

Biggs, John H. *Testimony on Stock Options before the U.S. Senate Finance Committee*. April 18, 2002.

U.S. Congress, Joint Committee on Taxation. *Overview of Federal Income Tax Provisions Relating to Employee Stock Options* (JCX-107-00). Washington, DC: October 10, 2000.

Education, Training, Employment, and Social Services:
Employment

EXCLUSION OF BENEFITS PROVIDED UNDER CAFETERIA PLANS

Estimated Revenue Loss
[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	33.6	-	33.6
2009	36.8	-	36.8
2010	40.3	-	40.3
2011	44.8	-	44.8
2012	45.9	-	45.9

Authorization

Section 125.

Description

Cafeteria plans allow employees to choose among cash and certain nontaxable benefits (such as health care) without paying taxes if they select the latter. A general rule of tax accounting is that when taxpayers have the option of receiving both cash and nontaxable benefits they are taxed even if they select the benefits since they are deemed to be in constructive receipt of the cash (that is, since it is within their control to receive it). Section 125 of the Internal Revenue Code provides an express exception to this rule when certain nontaxable benefits are chosen under a cafeteria plan. The tax expenditure measures the loss of revenue from not including the nontaxable benefits in taxable income when employees have this choice. Cafeteria plan benefits are also not subject to employment taxes of either the employer or employee.

"Cash" includes not only cash payments but also employment benefits that are normally taxable, such as vacation pay. Nontaxable benefits include any employment benefits that are excluded from gross income under a specific section of the Code, other than long-term care insurance, scholarships or fellowships, employer educational assistance, miscellaneous fringe benefits, and most forms of deferred compensation. Nontaxable benefits typically included in cafeteria plans are accident and health insurance, dependent care assistance, group-term life insurance, and adoption assistance. If health insurance is the only benefit offered, the plan is known as a premium conversion plan. Employer contributions to health savings accounts are also an allowable nontaxable benefit.

Most flexible spending accounts (FSAs) are governed by cafeteria plan provisions, as are premium conversion arrangements under which employees pay their share of health insurance premiums on a pretax basis. In both cases, employees are choosing between cash wages (through voluntary salary-reduction agreements) and nontaxable benefits.

Cafeteria plans must be in writing. The written plan must describe the available benefits, eligibility rules, procedures governing benefit elections (usually occurring during an annual open season), employer contributions, and other matters. Under IRS regulations, midyear election changes generally are allowed only for employee status changes (e.g., the birth of a child) or benefit cost changes (e.g., child care fees increase), though midyear changes on the basis of cost are not allowed for health benefits.

Highly compensated individuals are taxed on all benefits if the cafeteria plan discriminates in favor of them as to eligibility, as are highly compensated participants with respect to contributions and benefits. Highly compensated individuals and participants include officers, 5-percent shareholders, someone with high compensation (more than $105,000 in 2008), or a spouse or dependent of any of these individuals. In addition, if more than 25 percent of the total tax-favored benefits are provided to key employees, they will be taxed on all benefits. Key employees include officers earning more than $150,000, 5-percent owners, 1-percent owners earning more than $150,000, or one of the top 10 employee-owners. There are some exceptions to these rules, including cafeteria plans maintained under collective bargaining agreements.

Amounts in health care FSAs may be rolled over into Health Savings Accounts (HSAs) under legislation adopted at the end of 2006 (P.L. 109-432).

Impact

Cafeteria plans allow employees to choose among a number of nontaxable employment benefits without incurring a tax liability simply because they

could have received cash. The principal effect is to encourage employers to give employees some choice in the benefits they receive.

As with other tax exclusions, the tax benefits are greater for taxpayers with higher incomes. Higher income taxpayers may be more likely to choose nontaxable benefits (particularly health care benefits) instead of cash, which would be taxable. Lower income taxpayers may be more likely to choose cash, which they may value more highly and for which the tax rates would be comparatively low.

More employers reportedly are offering cafeteria plans, but employee access to them depends largely on firm size. Consider health care flexible spending accounts (FSAs), one of the most common plan options, which the 2006 Medical Expenditure Panel Survey (MEPS) found were offered by 21 percent of private-sector firms and were available to 53 percent of private-sector employees. According to this survey, 67 percent of larger firms (50 or more workers) offered health care FSAs but only 5 percent of smaller firms did. Similarly, 70 percent of workers in larger firms had access to health care FSAs, but only 9 percent did in smaller firms.

Actual usage is considerably less. According to a 2006 Mercer survey, 20% of eligible employees in firms of 500 or more employees participated in a health care FSA, as did 36% of eligible employees in firms of 10 or more employees. Reasons for low FSA participation include employee perceptions of complexity, concerns about end-of-year forfeitures, and limited employer encouragement. For lower income employees, particularly those who do not use much health care, the tax savings may not be sufficient incentive to participate.

FSAs were made available to federal government employees starting on July 1, 2003. In September 2008, approximately 240,000 federal employees had a health care FSA. Nearly all federal employees who have Federal Employees Health Benefit insurance elect premium conversion .

Rationale

Under the Employee Retirement Income Security Act of 1974 (ERISA), an employer contribution made before January 1, 1977 to a cafeteria plan in existence on June 27, 1974 was required to be included in an employee's gross income only to the extent the employee *actually* elected taxable benefits. For plans not in existence on June 27, 1974, the employer contribution was included in gross income to the extent the employee *could* have elected taxable benefits.

The Tax Reform Act of 1976 extended these rules to employer contributions made before January 1, 1978. The Foreign Earned Income Act

of 1978 made a further extension until the effective date of the Revenue Act of 1978 (*i.e.*, through 1978 for calendar-year taxpayers).

In the Revenue Act of 1978, the current provision as outlined above was added to the Code to ensure that the tax exclusion was permanent, but no specific rationale was provided.

The Deficit Reduction Act of 1984 limited permissible benefits and established additional reporting requirements. The Tax Reform Act of 1986 imposed stricter nondiscrimination rules (regarding favoritism towards highly compensated employees) on cafeteria and other employee benefit plans. In 1989, the latter rules were repealed by legislation to increase the public debt limit (P.L. 101-140).

By administrative rulings, federal government employees were allowed to start paying their health insurance premiums on a pretax basis in 2000 and to establish flexible spending accounts in 2003.

Also by administrative ruling, in 2005 the Internal Revenue Service (IRS) allowed employees an additional 2 and ½ months to use remaining balances in their health care FSAs at the end of the year. Previously, unused balances at the end of the year were forfeited to employers.

In August 2007 the IRS issued new proposed rules for cafeteria plans that will generally be effective on January 1, 2009, though taxpayers may adopt them sooner. The rules have not yet been finalized. IRS rules for cafeteria plans are important since there is relatively little statutory language, particularly for FSAs. In August 2007 the IRS also withdrew previously proposed rules that had been used for guidance.

Assessment

Cafeteria plans often are more attractive to employees than fixed benefit packages since they can choose the benefits best suited to their individual circumstances. Usually, choice extends to both the type of benefit (health care, child care, etc.) as well as the amount, at least within certain limits. Ability to fine-tune benefits increases the efficient use of resources and may help some employees better balance competing demands of family and work.

As with other employment benefits, however, the favored tax treatment of cafeteria plans leads to different tax burdens for individuals with the same economic income. One justification for this outcome might be that it is in the public interest for employers to provide social benefits to workers if otherwise they would enroll in public programs or go without coverage. However, providing social benefits through employment puts burdens on employers, particularly those with a small number of workers, and may impede workers' willingness and ability to move among jobs.

Health care flexible spending accounts (FSAs) funded through salary reduction agreements allow employees to receive tax benefits for the first dollars of their unreimbursed medical expenditures; in contrast, other taxpayers get tax benefits only if they itemize deductions and their unreimbursed expenditures exceed 7 ½ percent of adjusted gross income. It is possible that FSAs encourage additional consumption of health care, though many workers are reluctant to put large sums in their accounts since unused amounts cannot be carried over to later years.

Selected Bibliography

Employee Benefits. *Journal of Accountancy*. vol. 206 no. 2 (August 2008)

Lyke, Bob and Julie M. Whittaker. *Tax Benefits for Health Insurance and Expenses: Overview of Current Law and Legislation.* Library of Congress. CRS Report RL33505. (2008)

Lyke, Bob and Carol Rapaport *Health Care Flexible Spending Accounts*. Library of Congress. CRS Report RL32656. (2008)

Roberts, Gary E. Municipal Government Benefits Practices and Personnel Outcomes: Results from a National Survey. *Public Personnel Management.* v. 33 no. 1 (Spring, 2004).

Ryan, Chris and Cathy Wells. FSA Rule Change a Mixed Bag for Participants, Administrators. *Benefits Law Journal.* vol. 18 no. 3 (Autumn, 2005).

Turner, Robert. Fringe Benefits. *The Encyclopedia of Taxation and Tax Policy*. 2nd edition. Washington, the Urban Institute Press, 2005.

U.S. Congress. Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*, 98th Congress, 2nd session, December 31, 1984, pp. 867-872.

EXCLUSION OF HOUSING ALLOWANCES FOR MINISTERS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.6	-	0.6
2009	0.6	-	0.6
2010	0.7	-	0.7
2011	0.7	-	0.7
2012	0.7	-	0.7

Authorization

Section 107.

Description

Under an exclusion available for a "minister of the gospel," gross income does not include:

(1) the fair rental value of a church-owned or church-rented home furnished as part of his or her compensation, or

(2) a cash housing/furnishing allowance paid as part of the minister's compensation.

The housing/furnishing allowance may provide funds for rental or purchase of a home, including down payment, mortgage payments, interest, taxes, repairs, furniture payments, garage costs, and utilities.

Ministers receiving cash housing allowances also may claim deductions on their individual income tax returns for mortgage interest and real estate

taxes on their residences even though such expenditures were allocable, in whole or in part, to tax-free receipt of the cash housing allowance. While excluded from income taxes, the fair rental value or cash housing/furnishing allowance is subject to Social Security payroll taxes.

Impact

As a result of the special exclusion provided for parsonage allowances, ministers receiving such housing allowances pay less tax than other taxpayers with the same or smaller economic incomes. The tax benefit of the exclusion also provides a disproportionately greater benefit to relatively better-paid ministers, by virtue of the higher marginal tax rates applicable to their incomes.

Further, some ministers claim income tax deductions for housing costs allocable to the receipt of tax-free allowances.

Rationale

The provision of tax-free housing allowances for ministers was first made a part of the Internal Revenue Code by passage of the Revenue Act of 1921 (P.L. 98 of the 67th Congress), without any stated reason. The original rationale may reflect the difficulty of placing a value on the provision of a church-provided rectory. Since some churches provided rectories to their ministers as part of their compensation, while other churches provided a housing allowance, Congress may have wished to provide equal tax treatment to both groups. Another suggested rationale is that originally the provision was provided in recognition of the clergy as an economically deprived group with low incomes.

The Internal Revenue Service reversed a 1962 ruling (Ruling 62-212) in 1983 (Revenue Ruling 83-3) providing that, to the extent of the tax-free housing allowance, deductions for interest and property taxes may not be itemized as a tax deduction. This change was based on the belief that it was unfair to allow tax-free income to be used to generate individual itemized deductions to shelter taxable income.

In the Tax Reform Act of 1986 (P.L. 99-514), Congress reversed the IRS ruling because the tax treatment had been long-standing, and some Members were concerned that the IRS might treat tax-free housing allowances provided to U.S. military personnel similarly.

The Internal Revenue Service's position (Revenue Ruling 71-280) is that the exclusion may not exceed the fair rental value of the home plus the cost of utilities. The Tax Court held that amounts used to provide a home are excludable even if the amount received exceeds the fair market rental value

of the home (Richard D. Warren, et ux. v. Commissioner; 114 T.C. No. 23 (May 16, 2000)). In that case, 100 percent of compensation was designated as a housing allowance ($77,663 in 1993, $76,309 in 1994, and $84,278 in 1995). The court dismissed the IRS's argument that its position prevents unequal treatment between ministers for whom housing is provided and excluded and those ministers receiving a rental allowance. That decision was appealed to the Ninth Circuit Court of Appeals, which directed parties to submit briefs on whether the court should address the constitutionality of the parsonage exclusion.

In order to forestall action by the Ninth Circuit by making the underlying issue in the Warren case moot, Congress clarified the parsonage housing tax allowance with passage of the Clergy Housing Allowance Clarification Act of 2002 (P.L. 107-181). In large part Congress adopted the more conservative IRS position such that the "allowance does not exceed the fair rental value of the home, including furnishings and appurtenances such as a garage, plus the cost of utilities." The Act says that it is intended to "minimize government intrusion into internal church operations and the relationship between a church and its clergy" and "recognize that clergy frequently are required to use their homes for purposes that would otherwise qualify for favorable tax treatment, but which may require more intrusive inquiries by the government into the relationship between clergy and their respective churches with respect to activities that are inherently religious."

Assessment

The tax-free parsonage allowances encourage some congregations to structure maximum amounts of tax-free housing allowances into their minister's pay and may thereby distort the compensation package.

The provision is inconsistent with economic principles of horizontal and vertical equity. Since all taxpayers may not exclude amounts they pay for housing from taxable income, the provision violates horizontal equity principles. For example, a clergyman teaching in an affiliated religious school may exclude the value of his housing allowance whereas a teacher in the same school may not. This example shows how the tax law provides different tax treatment to two taxpayers whose economic incomes may be similar.

Ministers with higher incomes receive a greater tax subsidy than lower-income ministers because of their higher marginal tax rates. Vertical equity is a concept which requires that tax burdens be distributed fairly among people with different abilities to pay. The disproportionate benefit of the tax exclusion to individuals with higher incomes reduces the progressivity of the tax system, which is viewed as a reduction in equity.

Ministers who have church-provided homes do not receive the same tax benefits as those who purchase their homes and also have the tax deductions for interest and property taxes available to them. Code Section 265 disallows deductions for interest and expenses which relate to tax-exempt income except in the case of military housing allowances and the parsonage allowance. As such, this result is inconsistent with the general tax policy principle of preventing double tax benefits.

Selected Bibliography

Anthony, Murray S. and Kent N. Schneider. "How to Minimize Your Minister's Taxes," *National Public Accountant*, v. 40 (December 1995), pp. 22-25.

Aprill, Ellen P. "Parsonage and Tax Policy: Rethinking the Exclusion," *Tax Notes*, v. 96, no. 9 (Aug. 26, 2002), pp. 1243-1257.

Bednar, Phil. "After Warren: Revisiting Taxpayer Standing and the Constitutionality of Parsonage Allowances," *Minnesota Law Review*, v. 87 (June 2003), pp. 2101-2131.

Dwyer, Boyd Kimball. "Redefining 'Minister of the Gospel' To Limit Establishment Clause Issues," *Tax Notes*, v. 95, no. 12 (June 17, 2002), pp. 1809-1815.

Frazer, Douglas H. "The Clergy, the Constitution, and the Unbeatable Double Dip: The Strange Case of the Tax Code's Parsonage Allowance," *The Exempt Organization Tax Review*, v. 43. (February 2004), pp. 149-152.

Foster, Matthew W. "The Parsonage Allowance Exclusion: Past, Present, and Future," *Vanderbilt Law Review,* v. 44. January 1991, pp. 149-178.

Harris, Christine. "House Unanimously Clears Parsonage Exclusion Bill," *Tax Notes*, v. 95 no. 4 (April 22, 2002), pp. 474-475.

Hiner, Ronald R. and Darlene Pulliam Smith. "The Constitutionality of the Parsonage Allowance," Journal of Accountancy, v. 194. (Nov 2002), pp. 92-93.

Johnston, David Cay. "From Holy Men to Houses, A World of Tax Breaks," *New York Times*, March 1, 1998.

Koski, Timothy R. "Divine Tax Opportunities for Members of the Clergy," *Practical Tax Strategies*, v. 63 (October 1999), pp. 207-208, 241-246.

Martin, Vernon M., Jr. and Sandra K. Miller. "The Clergy's Unique Tax Issues," *The Tax Adviser*, v. 29 (August 1998), pp. 557-561.

Newman, Joel S. "On Section 107's Worst Feature: The Teacher-Preacher," *Tax Notes,* v. 61. December 20, 1993, pp. 1505-1508.

O'Neill, Thomas E. "A Constitutional Challenge to Section 107 of the Internal Revenue Code," *Notre Dame Lawyer,* v. 57. June 1982, pp. 853-867.

Raby, Burgess J.W. and William L. Raby. "Some Thoughts on the Parsonage Exemption Imbroglio," *Tax Notes*, v. 96, no. 11 (Sept. 9, 2002), p. 1497.

Rakowski, Eric. "The Parsonage Exclusion: New Developments," *Tax Notes*, v. 96, no. 3 (July 15, 2002), pp. 429-437.

Stokeld, Fred. "No Surprises in Ninth Circuit's Decision in Parsonage Case," *Tax Notes*, v. 96, no. 10 (Sept. 2, 2002), pp. 1318-1319.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*, H.R. 4170, 98th Congress, Public Law 98-369. Washington, DC: U.S. Government Printing Office, December 31, 1984, pp. 1168-1169.

— . *General Explanation of the Tax Reform Act of 1986*, H.R. 3838, 99th Congress, Public Law 99-514. Washington, DC: U.S. Government Printing Office, May 4, 1987, pp. 53-54.

Warren, Steven E. "Tax Planning for Clergy," *Taxes*, v. 72, January 1994, pp. 39-46.

Zelinsky, Edward A. "Dr. Warren, Section 107, and the Court-Appointed Amicus," *Tax Notes*, v. 96, no. 8 (Aug. 26, 2002), pp. 1267-1272.

Smole, David P., et al., *The Higher Education Opportunity Act: Reauthorization of the Higher Education Act,* Library of Congress, Congressional Research Service, Washington, D.C., (2008).

Solomon, Eric, Assistant Secretary for Tax Policy, Department of the Treasury, "Letter to Honorable Sander Levin on the income tax treatment of student loans forgiven under the Higher Education Act," (Sep. 19, 2008).

Revenue Ruling 2008-34, Law School Loan Repayment Assistance Programs, U.S. Treasury, Internal Revenue Service, (July 14, 2008).

EXCLUSION OF INCOME EARNED BY VOLUNTARY EMPLOYEES' BENEFICIARY ASSOCIATIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.0	-	2.0
2009	2.1	-	2.1
2010	2.1	-	2.1
2011	2.2	-	2.2
2012	2.3	-	2.3

Authorization

Sections 419, 419A, 501(a), 501(c)(9), 4976

Description

Voluntary Employees' Beneficiary Associations (VEBAs) provide life insurance, medical, disability, accident, and other welfare benefits to employee members and their dependents and beneficiaries. Most VEBAs are organized as trusts to be legally separate from employers. Provided certain requirements are met, the income earned by a VEBA is exempt from federal income taxes under Sections 501(a) and 501(c)(9). If the requirements are not met however, the income is subject to the unrelated business income tax (UBIT). With some exceptions, income earned by a VEBA used for prefunding retiree health benefits is subject to this tax.

Employer contributions to VEBAs are deductible within limits described below, while employee contributions are made with after-tax dollars. When distributed, VEBA benefits are taxable income to recipients unless there is a statutory exclusion explicitly pertaining to those kinds of benefits. Thus,

accident and health benefits are excludable under Sections 104 and 105, but severance and vacation pay benefits are taxable.

VEBAs must meet a number of general requirements, including: (1) the organization must be an association of employees who share a common employment-related bond; (2) membership in the association must be voluntary (or, if mandatory, under conditions described below); (3) the association must be controlled by its members, by an independent trustee (such as a bank), or by trustees or fiduciaries at least some of whom are designated by or on behalf of the members; (4) substantially all of the organization's operations must further the provision of life, sickness, accident, and other welfare benefits to employees and their dependents and beneficiaries; (5) none of the net earnings of the organization may accrue, other than by payment of benefits, directly or indirectly to any shareholder or private individual; (6) benefit plans (other than collectively-bargained plans) must not discriminate in favor of highly compensated individuals; and (7) the organization must apply to the IRS for a determination of tax exempt status.

These general requirements have been refined and limited by both IRS and court decisions. For example, employee members may have a common employer or affiliated employers, common coverage under a collective bargaining agreement, or membership in a labor union or a specified job classification. In addition, members may be employees of several employers engaged in the same line of business in the same geographic area. Not all members need be employees, but at least 90 percent of the membership one day each calendar quarter must be employees. Membership may be required if contributions are not mandatory or if it is pursuant to a collective bargaining agreement or union membership. Permissible benefits generally include those that safeguard or improve members' health or that protect against contingencies that interrupt or impair their earning power including vacation benefits, recreational activities, and child care. Prohibited benefits include pension and annuities payable at retirement and deferred compensation unless it is payable due to an unanticipated event such as unemployment.

VEBA benefits may not discriminate in favor of the highly paid. In addition, VEBAs used for prefunding of retiree medical or life insurance benefits are required to establish separate accounts for members who are key employees.

In general, employer deductions for VEBA contributions are limited to the sum of qualified direct costs and additions to qualified asset accounts, minus VEBA after-tax net income. These account limits are specified in Internal Revenue Code Sections 419 and 419A. *Qualified direct costs* are the amounts employers could have deducted for employee benefits had they used cash basis accounting (essentially, benefits and account expenses actually paid during the year). *Qualified asset accounts* include: (1) reserves

set aside for claims incurred but unpaid at the end of the year for disability, medical, supplemental unemployment and severance pay, and life insurance benefits; (2) administrative costs for paying those claims; and (3) additional reserves for post-retirement medical and life insurance benefits and for non-retirement medical benefits of bona fide association plans. The reserve for post-retirement benefits must be funded over the working lives of covered individuals on a level basis, using actuarial assumptions incorporating current, not projected, medical costs. For post-retirement life insurance, amounts in excess of $50,000 per employee may not be taken into account in determining the reserve. Special limits apply to certain benefits. *After-tax net income* consists of net interest and investment earnings plus employee contributions, minus any unrelated income tax liability. Employer contributions are deductible only if they would otherwise be deductible as a trade or business expense or as an expense related to the production of income. In addition, employer contributions are deductible only in the year actually paid.

The prefunding limits just described do not apply to collectively bargained or employee pay-all plans (sometimes called 419A(f)(5) plans) or to multiple employer welfare plans (MEWAs) of ten or more employers in which no employer makes more than 10 percent of the contributions (sometimes called 419A(f)(6) plans). The latter plans (MEWAs) cannot have experienced rated contributions for single employers.

VEBAs are subject to the UBIT to the extent they are overfunded because contributions exceed account limits. However, the UBIT does not apply on the following sources of income: (1) income that is either directly or indirectly attributable to assets held by a VEBA as of July 18, 1984 (the date of enactment of the Deficit Reduction Act of 1984); (2) income on collectively bargained or employee pay-all VEBAs; and (3) income on VEBAs for which substantially all contributions came from tax-exempt employers. Tax rates applicable to trusts are used to calculate the UBIT for VEBAs organized as trusts.

Under Section 4976, reversions of VEBA assets to an employer generally are subject to a 100% excise tax.

Impact

VEBAs have been used by employers for a variety of reasons including to segregate assets, earn tax free investment returns, reduce future contribution requirements by prefunding, create an offsetting asset for an employer liability and meet requirements of rate making bodies and regulatory agencies. Funding a welfare benefit through a VEBA often offers tax advantages to the employer. The magnitude of the tax advantage depends on the amount of benefits payable and the duration of the liability. Thus, the tax advantage is greater for a VEBA that funds the disabled claim

reserve for a Long Term Disability plan than for a VEBA that funds the Incurred but Not Paid claim reserve for a medical plan. The greatest tax advantage accrues to an employer that uses a VEBA for prefunding of a retiree health care plan, especially if the prefunding is for a collectively bargained group of employees.

Unlike qualified defined benefit pension plans, employers are not legally required to prefund retiree health plans. However, certain employers have found it advantageous to prefund retiree health benefits. Utilities such as electric, gas, water, and telephone companies (prior to deregulation) were required by regulators to prefund retiree benefits in order to include the cost of the benefits in rates they charged to customers. Similarly, companies that did business with the U.S. Department of Defense were required to prefund retiree benefits in order to include the cost of benefits as part of the contract charges.

Use of VEBAs for prefunding retiree health benefits gathered momentum after the Financial Accounting Standards Board (FASB) required accrual accounting for post-retirement benefits other than pensions under Statement of Financial Accounting Standard 106 (FAS 106). This accounting standard, which was effective for employers' fiscal years beginning after December 15, 1992, required employers to calculate the net periodic postretirement health care cost on an accrual basis and recognize it as an expense in the employer's income statement. If the employer had segregated assets dedicated to the payment of retiree health care benefits, the return on these assets reduced the net periodic postretirement health care cost. With the release of FAS 106, employers were in search of the ideal funding vehicle that met all of the following conditions: (1) the employer could make tax deductible contributions; (2) the rate of return on the funding vehicle compared favorably to alternate uses of employer funds; (3) adequate contributions could be made for funding the plan obligations; and (4) assets were inaccessible to the employer for any purpose other than specified in the plan. A collectively bargained VEBA was the one funding vehicle that met all of these criteria. Although non-collectively bargained VEBAs had shortcomings, some employers used them nonetheless. Investment strategies used to improve the after-tax rate of return for such VEBAs included buying life insurance within the VEBA trust so that the VEBA could benefit from the tax-free inside buildup of the insurance policy.

Because of the more advantageous tax treatment for collectively bargained VEBAs, employers used VEBAs for prefunding retiree health benefits more frequently for unionized employees than for non-union employees. Investment income on the funds accumulated tax free and there were no limits on contributions. Some employers also established employee-pay-all VEBAs for prefunding employee out-of-pocket health care costs in retirement. In this type of VEBA, employees make all of the contributions, with no contributions made by employers, and the investment income on the VEBA accumulates tax free. Employees can withdraw funds

after retirement from the VEBA to pay health care costs without paying taxes on the withdrawals.

Recently, there has been interest in using employee-pay-all VEBAs to provide medical benefits to retirees of bankrupt companies. Retirees in bankrupt companies often lose some or all of their health care coverage. By pooling the risk in a VEBA, retirees may find that the premiums are more attractive than otherwise available in the individual health insurance market.

In 2007, the Big-Three automakers (General Motors, Ford, and Chrysler LLC) made agreements with the United Auto Workers (UAW) to establish VEBAs for retiree health benefits. Under the agreements, the automakers would be able to nearly eliminate their responsibility for retiree health benefits for unionized workers in exchange for making cash and other financial contributions that were significantly less than the present value of the obligations. While the retired workers might eventually have to make up some of the shortfall (through higher premiums and reduced benefits, for example), for the most part the benefits would be protected if the automakers filed for bankruptcy.

The Survey of Employer Health Benefits conducted by the Kaiser Family Foundation and the Health Research and Educational Trust indicates that in 2008, 31 percent of large firms (200 or more employees) offered retiree health benefits compared with 4 percent of small firms (3 to199 employees). Among large firms, firms with union employees were much more likely to offer retiree health benefits (46 percent) than firms without union employees (24 percent).

Not all firms that offer retiree health benefits use a VEBA for prefunding. According to the 2005 Mercer National Survey of Employer-Sponsored Health Plans, 9 percent of employers with 500 or more employees were then using a VEBA for this purpose. The likelihood of prefunding retiree health benefits with a VEBA increased with the size of the employer. While 25 percent of employers with 20,000 or more employees used a VEBA this way in 2005, only 5 percent of employers with 500 to 999 employees did. Mercer reported that the use of a VEBA for prefunding retiree health benefits was most common in the communication, transportation and utility industries.

Unlike pensions, VEBA health benefits accrue uniformly across all income groups. Retiree health benefits unlike pension benefits are not salary related. In fact, the benefits of VEBAs are more likely to accrue in favor of the lower paid employees for two reasons. First, VEBAs are used more often for unionized employees who are typically paid less than management employees. And secondly, when VEBAs are used for non-union employees, employers typically exclude key employees from the VEBA in order to avoid cumbersome administrative requirements to maintain separate accounts within the VEBA.

Rationale

VEBAs were originally granted tax-exempt status by the Revenue Act of 1928, which allowed associations to provide payment of life, sickness, accident, or other benefits to their members and dependents provided: (1) no part of their net earnings accrued (other than through such payments) to the benefit of any private shareholder or individual; and (2) 85 percent or more of their income consisted of collections from members for the sole purpose of making benefit payments and paying expenses. The House report noted that these associations were common and, without further explanation, that a specific exemption was desirable. Presumably, VEBAs were seen as providing welfare benefits that served a public interest and normally were exempt from taxation.

The Revenue Act of 1942 allowed employers to contribute to the association without violating the 85-percent-of-income requirement. In the Tax Reform Act of 1969, Congress completely eliminated the 85-percent requirement, allowing a tax exclusion for VEBAs that had more than 15 percent of their income from investments. However, the legislation imposed the UBIT on VEBA income (as well as the income of similar organizations) to the extent it was not used for exempt functions.

While VEBAs cannot be used for deferred compensation, sometimes it has been difficult to distinguish such benefits. Particularly after 1969, VEBAs presented opportunities for businesses to claim tax deductions for contributions that would not be paid out in benefits until many years afterwards, with investment earnings building tax-free. In many cases, the benefits were disproportionately available to corporate officers and higher-income employees. After passage of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), there was increased marketing of plans providing readily available deferred benefits (for severance pay, for example) to owners of small businesses that appeared to circumvent restrictions the Act had placed on qualified pensions.

In response, the Deficit Reduction Act of 1984 (DEFRA) placed tight restrictions on employer contributions (Section 419 of the Code) and limitations on accounts (Section 419A). In addition, tighter nondiscrimination rules were adopted with respect to highly compensated individuals. These changes applied to welfare benefit funds generally, not just VEBAs. The nondiscrimination rules were further modified by the Tax Reform Act of 1986. The Tax Reform Act of 1986 also exempted collectively bargained welfare benefit funds and employee pay-all plans from account limits, thereby exempting the investment income on such VEBA trusts from the UBIT.

DEFRA did not apply these restrictions to collectively bargained plans or the multiple employer welfare plans (MEWAs) described above. In

practice, both exemptions allowed arrangements that the IRS and others criticized as tax shelters. In 2003, the IRS stated its intention to issue regulations disallowing employer deductions for arrangements set up through sham labor negotiations. (By October, 2008 these rules had not yet been issued.) It also issued final regulations defining experienced-rating arrangements that preclude employer deductions for MEWAs.

The Pension Protection Act of 2006 authorized an additional reserve for non-retirement medical benefits of bona fide association plans.

In October, 2007, the Internal Revenue Service issued two notices (2007-83 and 2007-84) cautioning taxpayers not to use VEBAs to provide cash value life insurance or to provide post-retirement benefits such as health care on a seemingly nondiscriminatory basis that in practice primarily benefits the owners or other key employees. The notices were aimed at welfare benefit plans the IRS considers abusive that were being sold to professional corporations and other small businesses. In addition, the IRS clarified that deductions are not allowed under sec. 419 for contributions to pay cash value life insurance premiums (Rev. Rul. 2007-65). Deductions are disallowed whether the trust provides insurance as a benefit or uses the proceeds to fund other benefits.

Assessment

Although there appears to be some abuse of VEBAs by small employers for estate planning purposes, VEBAs have usually been used in ways that further social goals. When VEBAs are used for prefunding of retiree health benefits, they increase the likelihood of employees receiving such benefits. Particularly in case of bankruptcy, the presence of a VEBA with accumulated assets for payment of retiree health benefits offers retirees a measure of protection. Under current law, VEBAs offer an attractive way to prefund retiree health benefits for union employees, but not for non-union employees.

When an employer provides retiree health benefits, retirees typically have significant out-of-pocket payments for premiums, deductibles, and copayments. An employee-pay-all VEBA could be used to allow employees to accumulate funds during their working years for payment of out-of-pocket health care costs during retirement. However, current law poses some problems in the use of an employee-pay-all VEBA for this purpose. Amounts contributed by an active employee cannot be refunded to the employee or his family upon job termination or premature death. In addition, although investment income on funds in an employee-pay-all VEBA is not subject to the UBIT, if employee and employer contributions are commingled in the same VEBA, all investment income is subject to that tax. As concerns mount about the future of retiree health benefits, Congress might reconsider some of these restrictions.

With the addition of prescription drug coverage to Medicare, it is possible that some employers that are currently providing retiree health benefits will eliminate or reduce prescription drug coverage. To the extent that these employers have been prefunding retiree health benefits through VEBAs, the new provision would reduce their deductions for such prefunding.

Selected Bibliography

Creed, Maggie F. Investment Planning and Tax Implications for a Tax-Exempt Voluntary Employee Benefit Association Trust. Journal of Financial Service Professionals. vol 61 no.5 (September 2007).

Elswick, Jill. VEBAs Gain Currency for Retiree Medical Benefits. *Employee Benefit News*. (June 1, 2003).

Geisel, Jerry. Making Retiree Health Care Affordable. *Business Insurance*. v. 40 no. 4 (January 23, 2006).

Ghilarducci, Teresa. *The New Treaty of Detroit: Are Voluntary Employee Benefits Associations Organized Labor's Way Forward, or the Remnants of a Once Glorious Past?* New Labor Market Institutions and the Public Response: A Symposium to Honor Lloyd Ulman. Berkeley, California (October 26, 2007).

Grudzien, Larry. The Great Vanishing Benefit, Employer Provided Retiree Medical Benefits: The Problem and Possible Solutions. *J. Marshall Law Review*. vol. 39 (2005-2006)

Hesse, Katherine A. VEBAs — Ordinary and Necessary Expenses — Deductions and Constructive Dividends. *Benefits Quarterly*. vol. 20 no. 3 (2004)

Joint Committee on Taxation. Welfare Benefit Plans. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* JCS-41-84 (December, 1984), p. 774-806.

Kehoe, Danea M. 419A: A Legislative Odyssey. *Journal of Financial Service Professionals*. v. 56 no. 2 (March, 2002).

Koresko, John J. and Jennifer S. Martin: VEBAs, Welfare Plans, and Section 419(f)(6): Is the IRS Trying to Regulate or Spread Propaganda? *Southwestern University Law Review*, v. 32 (2003)

Lyke, Bob and Julie M. Whittaker. *Tax Benefits for Health Insurance and Expenses: Overview of Current Law and Legislation.* Library of Congress. CRS Report RL33505 (2008)

Macey, Scott J. and George F. O'Donnell: Retiree Health Benefits - The Divergent Paths. *New York University Review of Employee Benefits and Executive Compensation* (2003)

Moran, Anne E. VEBAs: Possibilities for Employee Benefit Funding. *Employee Relations Law Journal*. v. 29 no 1 (summer, 2003)

O'Brien, Ellen. *What Do the New Auto Industry VEBAs Mean for Current and Future Retirees?* AARP Public Policy Institute. (March 2008)

Richardson, Michael I. and Daniel R. Salemi. Funding Postretirement Health Benefits Through a VEBA. *Benefits and Compensation Digest* (September 2007)

Ross, Allen F. Are VEBAs Worth Another Look? *Journal of Accountancy*. v. 187 no. 5 (May, 1999).

EXCLUSION OF MISCELLANEOUS FRINGE BENEFITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	6.3	-	6.3
2009	6.4	-	6.4
2010	6.6	-	6.6
2011	7.5	-	7.5
2012	8.0	-	8.0

Authorization

Sections 132 and 117(D).

Description

Individuals do not include in income certain miscellaneous fringe benefits provided by employers, including services provided at no additional cost, employee discounts, working condition fringes, *de minimis* fringes, and certain tuition reductions. Special rules apply with respect to certain parking facilities provided to employees and certain on-premises athletic facilities.

These benefits also may be provided to spouses and dependent children of employees, retired and disabled former employees, and widows and widowers of deceased employees. Certain nondiscrimination requirements apply to benefits provided to highly compensated employees.

Impact

Exclusion from taxation of miscellaneous fringe benefits provides a subsidy to employment in those businesses and industries in which such

fringe benefits are common and feasible. Employees of retail stores, for example, may receive discounts on purchases of store merchandise. Such benefits may not be feasible in other industries — for example, for manufacturers of heavy equipment.

The subsidy provides benefits both to the employees (more are employed and they receive higher compensation) and to their employers (who have lower wage costs).

Rationale

This provision was enacted in 1984; the rules affecting transportation benefits were modified in 1992 and 1997. The Congress recognized that in many industries employees receive either free or discount goods and services that the employer sells to the general public. In many cases, these practices had been long established and generally had been treated by employers, employees, and the Internal Revenue Service as not giving rise to taxable income.

Employees clearly receive a benefit from the availability of free or discounted goods or services, but the benefit may not be as great as the full amount of the discount. Employers may have valid business reasons, other than simply providing compensation, for encouraging employees to use the products they sell to the public. For example, a retail clothing business may want its salespersons to wear its clothing rather than clothing sold by its competitors. As with other fringe benefits, placing a value on the benefit in these cases is difficult.

In enacting these provisions, the Congress also wanted to establish limits on the use of tax-free fringe benefits. Prior to enactment of the provisions, the Treasury Department had been under a congressionally imposed moratorium on issuance of regulations defining the treatment of these fringes. There was a concern that without clear boundaries on use of these fringe benefits, new approaches could emerge that would further erode the tax base and increase inequities among employees in different businesses and industries.

Assessment

The exclusion subsidizes employment in those businesses and industries in which fringe benefits are feasible and commonly used. Both the employees and their employers benefit from the tax exclusion. Under normal market circumstances, more people are employed in these businesses and industries than they would otherwise be, and they receive higher compensation (after tax). Their employers receive their services at lower

cost. Both sides of the transaction benefit because the loss is imposed on the U.S. Treasury in the form of lower tax collections.

Because the exclusion applies to practices which are common and may be feasible only in some businesses and industries, it creates inequities in tax treatment among different employees and employers. For example, consumer-goods retail stores may be able to offer their employees discounts on a wide variety of goods ranging from clothing to hardware, while a manufacturer of aircraft engines cannot give its workers compensation in the form of tax-free discounts on its products.

Selected Bibliography

Kies, Kenneth J. "Analysis of the New Rules Governing the Taxation of Fringe Benefits," *Tax Notes,* v. 38. September 3, 1984, pp. 981-988.

McKinney, James E. "Certainty Provided as to the Treatment of Most Fringe Benefits by Deficit Reduction Act," *Journal of Taxation*. September 1984, pp. 134-137.

Raby, Burgess J. W. and William L. Raby. "Working Conditions Fringes: Fishing Trips to Telecommuting," *Tax Notes*, Vol. 101, October 27,2003, pp. 503-507.

Sunley, Emil M., Jr. "Employee Benefits and Transfer Payments," *Comprehensive Income Taxation*, ed. Joseph A. Pechman. Washington, DC: The Brookings Institution, 1977, pp. 90-92.

Turner, Robert. "Fringe Benefits," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984.* Committee Print, 98th Congress, 2nd session. December 31, 1984, pp. 838-866.

— , Senate Committee on Finance. *Fringe Benefits*, Hearings, 98th Congress, 2nd session. July 26, 27, 30, 1984.

Education, Training, Employment, and Social Services:
Employment

DISALLOWANCE OF THE DEDUCTION FOR EXCESS PARACHUTE PAYMENTS

Estimated Revenue Loss*

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	-0.2	-0.2
2009	—	-0.2	-0.2
2010	—	-0.2	-0.2
2011	—	-0.2	-0.2
2012	—	-0.2	-0.2

* Estimate does not include effects of changes made by the Emergency Economic Stabilization Act of 2008

Authorization

Section 280G and 4999

Description

Corporations may enter into agreements with key personnel that are called parachute payments or "golden parachutes", under which the corporation agrees to pay these individuals substantial amounts contingent on a change in the ownership or control of the corporation. Any portion of such a payment over a base amount — an "excess parachute payment" — that is made to a disqualified individual is not deductible by the corporation. The base amount is the individual's average annual compensation from the five previous years and a disqualified individual is either a shareholder, an officer of the corporation or is among the highest paid 1 percent of employees of the corporation or the 250 highest paid individuals of the corporation. Severance payments to covered employees are also deemed an excess parachute payment for corporations that take place in the troubled asset relief program (TARP) or the direct purchase program. Any payment that violates applicable securities laws or regulations is also characterized as an excess parachute payment.

Excess parachute payments are not deductible by the corporation. In addition, an individual receiving the payments must pay an excise tax (in addition to income taxes) equal to 20 percent of the amount of the excess parachute payment. Parachute payments are subject to FICA taxes when paid to recipients.

The parachute payment provisions do not apply to certain types of payments, including reasonable compensation, qualified plan payments, payments by a domestic small business corporation, and payments by corporations that, immediately before a change in control, have no stock that is readily tradable on an established securities market.

Impact

The disallowance of the deduction for excess parachute payments removes a subsidy for businesses in industries where excess parachute payments are common and feasible. They increase the after-tax cost, to the corporation, of this form of compensation, relative to deductible forms of compensation. The excise tax component, also, lowers the after tax value of excess parachute payments to executives. All else equal, these effects should reduce the desirability of excess parachute payments.

Rationale

The golden parachute provisions were enacted by the Omnibus Budget Reconciliation Act of 1993, in part, because the agreements were thought to hinder acquisition activity in the marketplace. In particular, agreements to pay key personnel large amounts could make a target corporation less attractive to an acquiring corporation. In other situations, payments made to key personnel to encourage a takeover might not be in the best interests of the shareholders. And, regardless of whether a friendly or hostile takeover is involved, the amounts paid to key personnel reduce the amounts available for the shareholders.

The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) expended the definition of an excess parachute payment for corporations that benefit from the public's participation in their economic recovery. One factor motivating this change was concern over the fairness or equity of parachute payments being given to executives of companies that benefit from the Emergency Economic Stabilization Act of 2008.

Assessment

The use and magnitude of excess parachute payments have increased since the enactment of provisions designed to make them less desirable forms of compensation. Nevertheless, the original rationale for the provisions remains valid. In the absence of these provisions, it is possible that excess parachute payments would be more prevalent and further increase inequality.

Selected Bibliography

Bebchuk, Lucian A. "Executive Compensation as an Agency Problem," *Journal of Economic Perspectives* 17, (2003), pp. 71-92.

— and Yaniv Grinstein. *The Growth of Executive Pay*, National Bureau of Economic Research Working Paper no. 11443, (2005).

Jensen, Michael C. and Kevin J. Murphy. "Performance, Pay and Top-Management Incentives." *Journal of Political Economy 98,* (1990), pp. 225-264.

Knoeber, Charles R., "Golden Parachutes, Shark Repellents, and Hostile Tender Offers," *American Economic Review,* vol. 76, no.1 (1986), pp. 155-167.

Labonte, Marc and Gary Shorter, *The Economics of Corporate Executive Pay,* Library of Congress, Congressional Research Service Report RL33935. Washington, D.C.: 2007.

Lefaniwicz, Craig E., John R. Robinson, and Reed Smith, "Golden Parachutes and Managerial Incentives in Corporate Acquisitions: Evidence from the 1980s and 1990s," *Journal of Corporate Finance*, 2000, pp. 215-239.

Murphy, Kevin J. "Executive Compensation", in Orley Ashenfelter and David Card eds., *Handbook of Labor Economics* vol. 3, bk. 2. (New York: Elsevier, 1999).

U.S. Congress. Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984, H.R. 4170, 98th Congress, Public Law 98-369*. (Washington, DC: GPO, 1985), pp. 828-830.

CAP ON DEDUCTIBLE COMPENSATION FOR COVERED EMPLOYEES OF PUBLICLY HELD CORPORATIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	—	-0.5	-0.5
2009	—	-0.5	-0.5
2010	—	-0.5	-0.5
2011	—	-0.5	-0.5
2012	—	-0.5	-0.5

Authorization

Section 162(m)

Description

Publicly held corporations can, generally, deduct employee compensation in the calculation of taxable income. An exception to this rule pertains to executive compensation, for which only $1 million is deductible. This limit is reduced to $500,000 for corporations that take place in the troubled asset relief program (TARP). This threshold is reduced by the amount (if any) of excess golden parachute payments and any excise tax paid with respect to insider stock compensation. Performance-based compensation and specified commissions are not treated as compensation, for the purposes of this provision.

Impact

The cap on deductible executive compensation provides an incentive for businesses to favor performance-based compensation in the structuring of executive compensation package, relative to fixed compensation. Given the

uncertainty surrounding performance-based compensation this would bias, all else equal, total executive compensation upward.

Rationale

Before the Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66) all non-excessive executive compensation was deductible. The Act of 1993 codified this concept by enacting a $1 million cap on non-excessive executive compensation in response to concerns over the size of executive compensation packages.

The Emergency Economic Stabilization Act of 2008 reduced this cap, to $500,000 for corporations that benefit from the public's participation in their economic recovery. One factor motivating this change were concerns over the fairness or equity of high executive compensation being given to executives of companies that benefit from the Emergency Economic Stabilization Act of 2008.

Assessment

Since the early 1970s the real wages of non-managerial workers has been stagnant, while executive compensation has risen dramatically. Supporters of executive pay caps suggest that this is indicative of a larger social equity concern — inequality — and view the limit on deductible compensation as a tool to achieve greater equality. Opponents of the limitation, in contrast, argue that the limitation is inefficient because it creates a wedge between the marginal product and compensation of the executive.

Supporters of current CEO pay levels argue that executive compensation is determined by normal private market bargaining, that rising pay reflects competition for a limited number of qualified candidates, and that even the richest pay packages are a bargain compared with the billions in shareholder wealth that successful CEOs create. Others, however, view executive pay as excessive. Some see a social equity problem, taking CEO pay as symptomatic of a troublesome rise in income and wealth inequality. Others see excessive pay as a form of shareholder abuse made possible by weak corporate governance structures and a lack of clear, comprehensive disclosure of the various components of executive compensation.

Selected Bibliography

Bebchuk, Lucian A. "Executive Compensation as an Agency Problem," *Journal of Economic Perspectives* 17, (2003), pp. 71-92.

— and Yaniv Grinstein. *The Growth of Executive Pay*, National Bureau of Economic Research Working Paper no. 11443, (2005).

Jensen, Michael C. and Kevin J. Murphy. "Performance, Pay and Top-Management Incentives." *Journal of Political Economy 98,* (1990), pp. 225-264.

Labonte, Marc and Gary Shorter, *The Economics of Corporate Executive Pay,* Library of Congress, Congressional Research Service Report RL33935. Washington, D.C.: 2007.

Murphy, Kevin J. "Executive Compensation", in Orley Ashenfelter and David Card eds., *Handbook of Labor Economics* vol. 3, bk. 2. (New York: Elsevier, 1999).

EXCLUSION OF EMPLOYER-PROVIDED EDUCATION ASSISTANCE BENEFITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.8	-	0.8
2009	0.8	-	0.8
2010	0.9	-	0.9
2011	0.9	-	0.9
20120	0.9	-	0.9

Authorization

Section 127.

Description

An employee may exclude from gross income amounts paid by the employer for educational assistance (tuition, fees, books, supplies, etc.) pursuant to a written qualified educational assistance program. The annual limit is $5,250. Any excess is includable in the employee's gross income and is subject to both employment and income taxes. Amounts that exceed the limit may be excludable if they meet the working condition fringe benefits provision of Code Section 132.

Courses do not have to be job related. Those involving sports, games, or hobbies are covered only if they involve the employer's business, however. Courses can help employees meet minimum requirements for current work or prepare for a new career. Graduate education undertaken after December 31, 2001and before January 1, 2011 is covered.

The employer may make qualified assistance payments directly, by reimbursement to the employee, or may directly provide the education. The

plan may not discriminate in favor of highly compensated employees. One requirement is that no more than 5% of the total amount paid out during the year may be paid to or for employees who are shareholders or owners of at least 5% of the business. The employer must maintain records and file a plan return.

Impact

The exclusion of these benefit payments encourages employers to offer educational assistance to employees. Availability of the benefit varies across firms, depending upon such things as industry and employer size. Availability also varies within firms, depending upon the number of hours an employee works and their level of earnings for example. The U.S. Bureau of Labor Statistics reports on the percent of employees in the private sector with access to employer-provided educational assistance. In 2007, almost one-half of private sector employees had access to work-related educational assistance while only 15 percent had access to nonwork-related educational assistance as part of their fringe benefit package. Generally, employees in management, professional, and related occupations; in full-time jobs; who belong to labor unions; with average earnings of at least $15 per hour; and work at large firms (100 or more employees) are more likely to have educational assistance benefits made available to them by their firms.

The exclusion allows certain employees, who otherwise might be unable to do so, to continue their education. The value of the exclusion is dependent upon the amount of educational expenses furnished and the marginal tax rate.

Rationale

Section 127 was added to the law by the passage of the Revenue Act of 1978, effective through 1983. Prior to enactment, the treatment of employer-provided educational assistance was complex, with a case-by-case determination of whether the employee could deduct the assistance as job-related education.

Since its inception, the provision was reauthorized ten times. It first was extended from the end of 1983 through 1985 by the Education Assistance Programs. The Tax Reform Act of 1986 next extended it through 1987, and raised the maximum excludable assistance from $5,000 to $5,250. The Technical and Miscellaneous Revenue Act of 1988 reauthorized the exclusion retroactively to January 1, 1989 and extended it through September 30, 1990. The Revenue Reconciliation Act of 1990 then extended it through December 31, 1991, and the Tax Extension Act of 1991, through June 30, 1992. The Omnibus Reconciliation Act of 1993 reauthorized the provision retroactively and through December 31, 1994; the Small Business Job Protection Act re-enacted it to run from January 1, 1995

through May 31, 1997. The Taxpayer Relief Act of 1997 subsequently extended the exclusion — but only for undergraduate education — with respect to courses beginning before June 1, 2000. The Ticket to Work and Work Incentives Improvement Act of 1999 extended the exclusion through December 31, 2001. With passage of the Economic Growth and Tax Relief Reconciliation Act of 2001, the exclusion was reauthorized to include graduate education undertaken through December 31, 2010. The act also extended the existing rules for employer provided education assistance benefits until January 1, 2011. Congressional committee reports indicate that the latest extension was designed to lessen the complexity of the tax law and was intended to result in fewer disputes between taxpayers and the Internal Revenue Service.

Assessment

The availability of employer educational assistance encourages employer investment in human capital, which may be inadequate in a market economy because of spillover effects (i.e., the benefits of the investment extend beyond the individuals undertaking additional education and the employers for whom they work). Because all employers do not provide educational assistance, however, taxpayers with similar incomes are not treated equally.

Selected Bibliography

Black, Sandra and Lisa M. Lynch. "Human-Capital Investments and Productivity," *AEA Papers and Proceedings*, v. 86 (May 1996), pp. 263-267.

Cappelli, Peter. *Why Do Employers Pay for College?*. National Bureau of Economic Research. Working Paper 9225. Cambridge, MA: September 2002.

Hudson, Lisa with Rajika Bhandari, Katharin Peter, and David B. Bills. *Labor Force Participation in Formal Work-Related Education in 2000-01*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: September 2005.

Levine, Linda. *The Benefits of Education*. Congressional Research Service Report RL33238. Washington, DC: December 29, 2005.

Levine, Linda. *Tax Treatment of Employer Education Assistance for the Benefit of Employees*. Congressional Research Service Report RS22911. Washington, DC: July 3, 2008.

Luscombe, Mark A. "Employer Educational Assistance Programs: Can the Frustration of Lapses in Statutory Authority Be Avoided?" *Taxes*, v. 74 (April 1996), pp. 266-268.

Phillips, Lawrence C. and Thomas R. Robinson. "Financial Planning for Education Expenditures." *The CPA Journal*, v. 72, no 4, (April 2002), pp. 34-39.

Selingo, Jeffrey. "Adult Education: The End of the Magic Carpet Ride?," *Washington Post*, November 9, 2003, p. W43.

U.S. General Accounting Office. *Tax Expenditures: Information on Employer-Provided Educational Assistance*, GAO/GGD-97-28. Washington, DC: December 1996.

WORK OPPORTUNITY TAX CREDIT

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	0.5	0.6
2009	0.1	0.5	0.6
2010	0.1	0.6	0.7
2011	0.1	0.5	0.6
2012	0.1	0.4	0.5

Authorization

Sections 51 and 52.

Description

The Work Opportunity Tax Credit (WOTC) is available on a nonrefundable basis to for-profit employers who, through August 31, 2011, hire individuals from the following groups:

(1) members of families receiving benefits under the Temporary Assistance for Needy Families (TANF) program for a total of any 9 months during the 18-month period ending on the hiring date;

(2) qualified supplemental nutrition assistance program recipients (i.e., 18-39 year olds who are members of families receiving assistance under a supplemental nutrition assistance program under the Food and Nutrition Act of 2008 for the 6-month period ending on the hiring date, or receiving such assistance for at least 3 months of the 5-month period ending on the hiring date in the case of a family member no longer eligible for assistance under section 6(o) of the Food and Nutrition Act of 2008);

(3) designated community residents (i.e., 18-39 year olds on the hiring date whose principal place of abode is in an empowerment zone, an enterprise community, a renewal community, or a rural renewal county);

(4) ex-felons with hiring dates within 1 year of the last date of conviction or release from prison;

(5) vocational rehabilitation referrals (i.e., individuals having physical or mental disabilities resulting in substantial handicaps to employment who are referred to employers upon completion of or while receiving rehabilitative services pursuant to (a) an individualized written plan for employment under a state plan for vocational rehabilitation services under the Rehabilitation Act of 1973, (b)a vocational rehabilitation program for veterans carried out under chapter 31 of title 38, United States Code, or (c) an individual work plan developed and implemented by an employment network pursuant to subsection (g) of section 1148 of the Social Security Act);

(6) Supplemental Security Income (SSI) recipients who have received benefits under Title XVI of the Social Security Act for any month ending within the 60-day period ending on the hiring date;

(7) veterans who are (a) members of families receiving assistance under a supplemental nutrition assistance program under the Food and Nutrition Act of 2008 for at least a 3-month period ending during the 12-month period ending on the hiring date, or (b) entitled to compensation for a service-connected disability and having a hiring date not more than one year after having been discharged or released from active duty in the Armed Forces or having aggregate periods of unemployment of at least 6 months during the one-year period ending on the hiring date;

(8) summer youth (i.e., 16-17 year olds hired for any 90-day period between May 1 and September 15 whose principal place of abode is in an empowerment zone, enterprise community, or renewal community); and

(9) long-term family assistance recipients (i.e., members of families receiving TANF benefits (a) for at least the 18-month period ending on the hiring date, or (b) for any 18 months beginning after the Welfare to Work credit's enactment (August 5, 1997) and the earliest 18-month period beginning after August 5, 1997 ended during the past 2 years, or (c) who stopped being eligible for payments during the past 2 years because a federal or state law limited the maximum period of benefit receipt).

During the first year in which a WOTC-eligible person is hired (except for veterans entitled to compensation for a service-connected disability, summer youth, and long-term family assistance recipients), the employer can claim an income tax credit of 40% of the first $6,000 earned if the worker is retained for at least 400 hours. If the WOTC-eligible hire (except veterans entitled to compensation for a service-connected disability, summer youth, and long-term family assistance recipients) is retained for 120-399 hours, the subsidy rate is 25%. No credit thus can be claimed unless the employee remains on the employer's payroll for a minimum of 120 hours.

For veterans eligible because they receive compensation for service-connected disabilities, the maximum wage to which the subsidy rates apply

is the first $12,000 earned. For summer youth, the maximum wage is the first $3,000 earned. The Tax Relief and Health Care Act of 2006 (P.L. 109-432) provided that, for hiring long-term family assistance recipients after December 31, 2006, an employer can claim the 25% or 40% subsidy rate on the first $10,000 earned during the first year of employment and 50% on the first $10,000 earned during the second year of employment. (P.L. 109-432 incorporated a modified Welfare-to-Work (WtW) tax credit into the WOTC, thereby eliminating the WtW credit as a separate tax provision.)

The actual value of the credit to employers depends on their tax bracket. An employer's usual deduction for wages must be reduced by the amount of the credit as well. The credit also cannot exceed 90% of an employer's annual income tax liability, although the excess can be carried back 1 year or carried forward 20 years. The WOTC is allowed against the Alternative Minimum Tax.

Impact

An employer completes page one of IRS Form 8850 by the date a job offer is made to an applicant thought to belong to the WOTC-eligible population and completes page two of the form after the individual is hired. The IRS form and appropriate U.S. Department of Labor (DOL) form must be mailed to the state's WOTC coordinator within 28 days after the new hire's employment-start date. DOL's Employment Service (ES) then certifies whether the new hire belongs to one of the WOTC's eligible groups.

In FY2007, the ES issued 612,052 certifications of WOTC-eligible hires to employers. About 45% of all certifications were for qualified supplemental nutrition assistance program recipients and 28% were for members of families receiving TANF benefits. Another 8% of certifications were issued to employers for hiring designated community residents; 7% for ex-felons; and 6% for SSI recipients. The vocational rehabilitation referral, veterans, and summer youth groups accounted for the remaining 6% of certifications issued in FY2007. Certifications will exceed the number of credits claimed unless all WOTC-eligible hires remain on firms' payrolls for the minimum employment period (i.e., certifications reflect eligibility determinations rather than credits claimed).

Rationale

The temporary credit was authorized by the Small Business Job Protection Act of 1996 effective through September 30, 1997. It subsequently was extended several times, often after the provision had expired. As part of the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Act of 2007 (P.L. 110-28), the WOTC was extended through August 31, 2011.

WOTC primarily is intended to help individuals, who have difficulty obtaining employment in both good and bad economic times, get jobs in the private sector. The credit is designed to reduce the relative cost of hiring these low-skilled individuals by subsidizing their wages, and hence to increase employers' willingness to give them jobs despite their presumed low productivity. In recent years, eligible groups temporarily have been added in response to disasters (i.e., New York Liberty Zone business employees after the 2001 terrorist attack and Hurricane Katrina employees after the 2005 hurricane). The Tax Extenders and Alternative Minimum Tax Relief Act at Division C of the Emergency Economic Stabilization Act of 2008 (P.L. 110-343) reauthorized the WOTC through December 31, 2009, for employers who hire Hurricane Katrina employees to work in the disaster area.

A prior tax credit aimed at encouraging firms to hire hard-to-employ individuals, the Targeted Jobs Tax Credit (TJTC), was effective from 1978 through 1994. The TJTC was subject to criticism, but Congress, after making some revisions, retained this approach to increasing employment of disadvantaged workers.

Assessment

Based upon a survey of employers in two states conducted by the then General Accounting Office (GAO) in 2001, the agency speculated that employers were not displacing employees in order to replace them with individuals for whom they could claim the credit. According to the GAO, the cost of recruiting, hiring, and training WOTC-eligible workers appears to be higher than the amount of the credit that employers could claim. As employees certified for the credit were not terminated any more frequently than others when their earnings reached about $6,000 (the credit-maximizing level at that time)), the GAO surmised that employers were not churning their workforces to maximize credit receipt.

Another limited analysis, released in 2001, yielded a fairly unfavorable assessment of the credit's performance. Based on interviews with 16 firms in 5 States that claimed the credit, researchers found that the WOTC had little or no influence on the employers' hiring decisions.

A third study looked specifically at the "take-up" rate among two WOTC-eligible groups, namely, TANF recipients and supplemental nutrition assistance program recipients. It estimated that during the late 1990s relatively few newly employed members of either group had the credit claimed for them.

Selected Bibliography

Hamersma, Sarah. "The Work Opportunity Tax Credit: Participation Rates Among Eligible Workers." *National Tax Journal*, vol. 56, no. 4 (December 2003), pp. 725-738.

Hamersma, Sarah. *The Work Opportunity and Welfare-to-Work Tax Credits*. Urban-Brookings Tax Policy Center, No. 15. Washington, DC: October 2005.

Howard, Christopher. *The Hidden Welfare State: Tax Expenditures and Social Policy in the United States.* Princeton: Princeton University Press, 1997.

Levine, Linda. *The Work Opportunity Tax Credit (WOTC) and the Welfare-to-Work Tax Credit*. Congressional Research Service Report RL30089. Washington, DC: updated October 3, 2008.

— . *Targeted Jobs Tax Credit, 1978-1994*, Congressional Research Service Report 95-981. Washington, DC: September 19, 1995.

U.S. General Accounting Office. *Work Opportunity Credit: Employers Do Not Appear to Dismiss Employees to Increase Tax Credits*, GAO-01-329. Washington, DC: March 2001.

Westat and Decision Information Resources, Inc. *Employers' Use and Assessment of the WOTC and Welfare-to-Work Tax Credits Program*. Washington, DC: March 2001.

CREDIT FOR CHILD AND DEPENDENT CARE AND EXCLUSION OF EMPLOYER-PROVIDED CHILD CARE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	3.1	-	3.1
2009	2.6	-	2.6
2010	2.6	-	2.6
2011	2.5	-	2.5
2012	2.4	-	2.4

Authorization

Sections 21 and 129.

Description

A taxpayer may claim a nonrefundable tax credit (Section 21) for employment-related expenses incurred for the care of a dependent child (or a disabled dependent or spouse). The maximum dependent care tax credit is 35 percent of expenses up to $3,000, if there is one qualifying individual, and up to $6,000 for two or more qualifying individuals. The credit rate is reduced by one percentage point for each $2,000 of adjusted gross income (AGI), or fraction thereof, above $15,000, until the credit rate of 20 percent is reached for taxpayers with AGI incomes above $43,000. Married couples must file a joint return in order to be eligible for the credit.

In addition, payments by an employer, under a dependent care assistance program, for qualified dependent care assistance provided to an employee are excluded from the employee's income and, thus, not subject to federal individual income tax (Section 129). The qualified expenditures are not

counted as wages, and therefore, are also not subject to employment taxes. The maximum exclusion amount is $5,000, and may not exceed the lesser of the earned income of the employee or the employee's spouse if married. For each dollar a taxpayer receives through an employer dependent care assistance program, a reduction of one dollar is made in the maximum qualified expenses for the dependent care tax credit.

To qualify, the employer assistance must be provided under a plan which meets certain conditions, including eligibility conditions which do not discriminate in favor of principal shareholders, owners, officers, highly compensated individuals or their dependents, and the program must be available to a broad class of employees. The law provides that reasonable notification of the availability and terms of the program must be made to eligible employees.

Qualified expenses (for both the tax credit and the income exclusion) include expenses for household services, day care centers, and other similar types of noninstitutional care which are incurred in order to permit the taxpayer to be gainfully employed. Qualified expenses are eligible if they are for a dependent under 13, or for a physically or mentally incapacitated spouse or dependent who lives with the taxpayer for more than half of the tax year. Dependent care centers must comply with State and local laws and regulations to qualify. Payments may be made to relatives who are not dependents of the taxpayer or a child of the taxpayer under age 19.

Impact

The credit benefits qualified taxpayers with sufficient tax liability to take advantage of it, without regard to whether they itemize their deductions. It operates by reducing tax liability, but not to less than zero because the credit is nonrefundable. Thus, the credit does not benefit persons with incomes so low that they have no tax liability.

Distribution by Income Class of the Tax Expenditure for Child and Dependent Care Services, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	1.7
$20 to $30	13.4
$30 to $40	15.1
$40 to $50	9.1
$50 to $75	20.2
$75 to $100	15.9
$100 to $200	20.7
$200 and over	4.1

The credit rate phases down from 35 to 20 percent as income rises from $15,000 to $43,000, providing the largest monetary benefit to parents with incomes of $43,000 or less. In the past, the absence of an inflation adjustment has affected the ability of moderate-income taxpayers to receive the maximum benefits under the credit.

The tax exclusion provides an incentive for employers to provide, and employees to receive, compensation in the form of dependent-care assistance rather than cash. The assistance is free from income and employment taxes, while the cash is not. As is the case with all deductions and exclusions, this benefit is related to the taxpayer's marginal tax rate and, thus, provides a greater benefit to taxpayers in high tax brackets than those in low tax brackets. To the extent employers provide dependent care assistance rather than increases in salaries or wages, the Social Security Trust Fund and the Hospital Insurance Trust Fund (for Medicare) lose receipts. Because of the lower amounts of earnings reported to Social Security the employee may receive a lower Social Security benefit during retirement years.

Rationale

The deduction for child and dependent care services was first enacted in 1954. The allowance was limited to $600 per year and was phased out for families with income between $4,500 and $5,100. Single parents and widow(er)s did not have an income limitation for the deduction. The provision was intended to recognize the similarity of child care expenses to employee business expenses and provide a limited benefit. Some believe

compassion and the desire to reduce welfare costs contributed to the enactment of this allowance.

The provision was made more generous in 1964, and was revised and broadened in 1971. Several new justifications in 1971 included encouraging the hiring of domestic workers, encouraging the care of incapacitated persons at home rather than in institutions, providing relief to middle-income taxpayers as well as low-income taxpayers, and providing relief for employment-related expenses of household services as well as for dependent care.

The Tax Reduction Act of 1975 substantially increased the income limits ($18,000 to $35,000) for taxpayers who could claim the deduction.

The deduction was replaced by a nonrefundable credit with enactment of the Tax Reform Act of 1976. Congress believed that such expenses were a cost of earning income for all taxpayers and that it was wrong to deny the benefits to those taking the standard deduction. Also, the tax credit provided relatively more benefit than the deduction to taxpayers in the lower tax brackets.

The Revenue Act of 1978 provided that the child care credit was available for payments made to relatives. The stated rationale was that, in general, relatives provide better attention and the allowance would help strengthen family ties.

The tax exclusion was enacted in the Economic Recovery Tax Act of 1981 (P.L. 97-34), and was intended to provide an incentive for employers to become more involved in the provision of dependent care services for their employees. Also in 1981, the tax credit was converted into the current sliding-scale credit and increased. The congressional rationale for increasing the maximum amounts was due to substantial increases in costs for child care. The purpose of switching to a sliding-scale credit was to target the increases in the credit toward low- and middle-income taxpayers because Congress felt that group was in greatest need of relief.

The Family Support Act of 1988 modified the dependent care tax credit. First, the credit became available for care of children under 13 rather than 15. Second, a dollar-for-dollar offset was provided against the amount of expenses eligible for the dependent care credit for amounts excluded under an employer-provided dependent care assistance program. Finally, the act provided that the taxpayer must report on his or her tax return the name, address, and taxpayer identification number of the dependent care provider.

With passage of the Economic Growth and Tax Relief Reconciliation Act of 2001, the sliding-scale credit was increased 5 percent while the maximum expenditure amounts for care were raised from $2,400 to $3,000 for one qualifying individual and from $4,800 to $6,000 in the case of two or more

qualified individuals. It seems likely that these changes were made because these provisions are not subject to an automatic inflation provision.

The provision was further amended by the Job Creation and Worker Assistance Act of 2002 which determined that the amount of "deemed earned income" in the case of a nonworking spouse incapable of self-care or a student is increased to $250 if there is one qualifying child or dependent, or $500 if there are two or more children.

In 2004, the Working Families Tax Relief Act was passed which made two changes for dependent care expenses. The bill imposed a requirement that a disabled dependent (or spouse), who is not a qualifying child under age 13, live with the taxpayer for more than half the tax year. It also eliminated the requirement that the taxpayer maintain a household in which the qualifying dependent resides.

Assessment

An argument for the child and dependent care tax credit is that child care is a cost of earning income; if this is the rationale, however, it can also be argued that the amount should be a deductible expense that is available to all taxpayers.

The issue of whether the tax credit is progressive or regressive lingers because an examination of distribution tables shows that the greatest federal revenue losses occur at higher rather than lower income levels. The distribution table appearing earlier in this section shows that taxpayers whose adjusted gross incomes were under $20,000 are estimated to claim 0.6 percent of the total value of the tax credit in 2005, while taxpayers in the $50-$75,000 income class are estimated to claim 21.0 percent. However, the determination of the dependent care tax credit progressivity cannot be made simply by comparing an estimate of the federal tax expenditure. A more appropriate measure is the credit amount relative to the taxpayer's income.

It is generally observed that the credit is regressive at lower income levels primarily because the credit is non-refundable. Thus, the structure of the credit (albeit, except at low-income levels) has been found to be progressive.

This is not meant to imply that if the credit were made refundable it would solve all of the problems associated with child care for low-income workers. For example, the earned income tax credit is refundable and designed so that payments can be made to the provision's beneficiaries during the tax year. In practice, few elect to receive advance payments, and wait to claim the credit when their annual tax returns are filed the following year. This experience illustrates the potential problems encountered in designing a transfer mechanism for payment of a refundable child care credit. The truly poor would need such payments in order to make payments to caregivers.

The child and dependent care tax credit still lacks an automatic adjustment for inflation, while other code provisions are adjusted yearly. In the past, this absence of an automatic yearly adjustment has affected the ability of low-income taxpayers to use the credit.

Prior to tax year 2003, the qualifying expenditure amount had not been increased since 1982. The current $3,000 and $6,000 limits for qualified expenses, which expire in 2010, are equivalent to $58 per week for one qualifying individual and $115 for two or more qualifying individuals. This amount is equivalent to $1.45 per hour per individual (using a standard 40 hour work-week), which is far below the federal minimum wage level, and below the median weekly cost of paid child care in 1999 ($69 a child).

In order to properly administer the dependent care tax credit, the Internal Revenue Service requires submission of a tax identification number for the provider of care. To claim the credit complicates income tax filing, although the complexity aids in compliance by reducing fraudulent claims. To the extent that payments are made to individuals, the taxpayer may also be responsible for employment taxes on the payments.

The debate over the income exclusion for dependent care expenses turns on whether the expenses are viewed as personal consumption or business expenses (costs of producing income). Some have noted that the $5,000 limit for the exclusion may be an attempt to restrict the personal consumption element for middle and upper income taxpayers.

Since all employers will not provide a dependent care assistance program, the tax exclusion violates the economic principle of horizontal equity, in that all taxpayers with similar incomes are not treated equally. Since upper-income taxpayers will receive a greater subsidy than lower-income taxpayers because of their higher tax rate, the tax subsidy is inverse to need. If employers substitute benefits for wage or salary increases, the benefits are not subject to employment taxes, impacting the Social Security and Hospital Insurance Trust Funds.

On the positive side, it is generally believed that the availability of dependent care can reduce employee absenteeism and unproductive work time. The tax exclusion may also encourage full participation of women in the work force as the lower after-tax cost of child care may not only affect labor force participation but hours of work. Further, it can be expected that the provision affects the mode of child care by reducing home care and encouraging more formal care such as child care centers. Those employers that may gain most by the provision of dependent-care services are those whose employees are predominantly female, younger, and whose industries have high personnel turnover.

Selected Bibliography

Altshuler, Rosanne. and Amy Ellen Schwartz. "On the Progressivity of the Child Care Tax Credit: Snapshot Versus Time-Exposure Incidence," *National Tax Journal*, v. 49 (March 1996), pp. 55-71.

Averett, Susan L.; H. Elizabeth Peters, and Donald M. Waldman. "Tax Credits, Labor Supply, and Child Care," *The Review of Economics and Statistics*, v. 79 (February 1997), pp. 125-135.

Benson, Joseph E. and Arthur A. Whatley. "Pros and Cons of Employer-Sponsored Child Care," J*ournal of Compensation and Benefits*, v. 9 (January/February 1994), pp. 16-20.

Connelly, Rachel, Deborah S. Degraff, and Rachel Willis. "The Value of Employer-Sponsored Child Care to Employees," *Industrial Relations*, v. 43, issue 4, October 2004, pp. 759-793.

Dickert-Conlin, Stacy, Katie Fitzpatrick, and Andrew Hanson, "Utilization of Income Tax Credits by Low-Income Individuals, " *National Tax Journal* v.58, no. 4, December 2005.

Dunbar, Amy E. "Child Care Expenses: The Child Care Credit," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005, pp. 53-55.

Fischer, Efrem Z. "Child Care: The Forgotten Tax Deduction," *Cardozo Women's Law Journal*, v. 3, no. 1 (1996), pp. 113-134.

Gentry, William M. and Alison P. Hagy. "The Distributional Effects of the Tax Treatment of Child Care Expenses." Cambridge, Mass., National Bureau of Economic Research, 1995. 43 p. (Working Paper no. 5088).

Gravelle, Jane G. *Federal Income Tax Treatment of the Family*, Library of Congress, Congressional Research Service Report 91-694 RCO. Washington, DC (Available from the author).

Heen, Mary L. "Welfare Reform, Child Care Costs, and Taxes: Delivering Increased Work-Related Child Care Benefits to Low-Income Families. *Yale Law and Policy Review*, v. 13 (January 1996), pp. 173-217.

Hollingsworth, Joel S. "Save the Cleavers: Taxation of the Traditional Family," *Regents University Law Review*, v. 13, no. 1, (2000/2001), pp. 29-64.

Kelly, Erin L. "The Strange History of Employer-Sponsored Child Care: Interested Actors, Uncertainty, and the Transformation of Law in Organizational Fields," *The American Journal of Sociology*, v. 109, no. 3, November 2003, pp. 606-649.

Koniak, Jaime. "Should the Street Take Care? The Impact of Corporate-Sponsored Day Care on Business in the New Millenium." *Columbia Business Law Review*, 2002, pp. 193-222.

McIntyre, Lee. "The Growth of Work-Site Daycare," *Federal Reserve Bank of Boston Regional Review*, v. 10, no. 3, (2000) pp. 8-15.

National Women's Law Center, "Indexing the DCTC is Necessary to Prevent Further Erosion of the Credit's Value to Low-Income Families," working paper, April 2003, pp. 1-4.

Rosenberg, Lee Fletcher. "Child Care Benefits May Get Boost From Tax Credit," *Business Insuranc*e, v. 35, no. 31 (July 2001), pp. 3, 34.

Rothausen, Teresa J., Jorge A. Gonzalez and Nicole E. Clarke. "Family-Friendly Backlash — Fact or Fiction? The Case of Organizations' On-Site Child Care Centers," *Personnel Psychology*, v. 51, no. 3 (Autumn 1998), pp. 685-706.

Scott, Christine. *Dependent Care: Current Tax Benefits and Legislative Issues*, Library of Congress, Congressional Research Service Report RS21466, Washington, DC.,2008.

Seetharaman, Ananth and Govind S. Iyer. "A Comparison of Alternative Measures of Tax Progressivity: The Case of the Child and Dependent Care Credit," *Journal of the American Taxation Association*, v. 17 (Spring 1995), pp. 42-70.

Sprang, Ginny, Mary Secret and Judith Bradford. "Blending Work and Family: A Case Study," *Affilia*, v. 14, no. 1 (Spring 1999), pp. 98-116.

Steuerle, C. Eugene. "Systemic Thinking About Subsidies for Child Care," *Tax Notes* 78 (1998): 749.

Stoltzfus, Emily. *Citizen, Mother, Worker*, University of North Carolina Press, 2003.

Thomas, Ann F. and Alison P. Hagy. "Forum on Married Women and the Income Tax: Marriage Penalties and Marriage Bonuses of the 105th Congress. Panel III: Child Care and Federal Tax Policy," *New York Law School Journal of Human Rights*, v. 16, pt. 1 (Symposium 1999), pp. 203-216.

U.S. Congress, Congressional Budget Office. *Budget Options*. "Eliminate the Tax Exclusion for Employer-Sponsored Dependent Care." Washington, DC: February 2001, p. 406.

U.S. Congress, House Committee on Ways and Means. *2004 Green Book; Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*, Committee Print, 108th Congress, 2d Session. March 2004, pp. 13-49.

U.S. Congress, Joint Committee. *General Explanation of the Economic Recovery Tax Act of 1981 (H.R. 4242, 97th Congress; Public Law 97-34)*. Washington, DC: U.S. Government Printing Office, December 31, 1981, pp. 53-56.

Wiley, Michael J. and Anthony P. Curatola. "Dependent Care Assistance Programs," *Strategic Finance Magazine*, v. 83, no. 9 (March 2002), pp. 17-18.

Woodward, Nancy Hatch. "Child Care to the Rescue," *HR Magazine*, v. 44, no. 8 (August 1999) pp. 82-84.

CREDIT FOR EMPLOYER-PROVIDED DEPENDENT CARE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1])Less than $50 million.

Authorization

Section 45F.

Description

Employers are allowed a tax credit equal to 25 percent of qualified expenses for employee child care and 10 percent of qualified expenses for child care resource and referral services. Qualified child care expenses include the cost of acquiring, constructing, rehabilitating or expanding property used for a qualified child care facility, costs for the operation of the facility (including training costs and certain compensation for employees, and scholarship programs), or for contracting with a qualified child care facility to provide child care.

A qualified child care facility must have child care as its principal purpose and must meet all applicable State and local laws and regulations. A facility operated by a taxpayer is not a qualified child care facility unless, in addition to these requirements, the facility is open to all employees and, if qualified child care is the principal trade or business of the taxpayer, at least 30

percent of the enrollees at the facility are dependents of employees of the taxpayer. Use of a qualified child care facility and use of child care resource and referral services cannot discriminate in favor of highly paid employees.

The maximum total credit that may be claimed by a taxpayer cannot exceed $150,000 per taxable year. The credit is reduced by the amounts of any tax deduction claimed for the same expenditures. Any credit claimed for acquiring, constructing, rehabilitating, or expanding property is recaptured if the facility ceases to operate as a qualified child care facility, or for certain ownership transfers within the first 10 years. The credit recapture is a percentage, based on the year when the cessation as a qualified child care facility or transfer occurs.

Impact

A 25 percent credit is a very large tax subsidy which should significantly decrease the cost of on-site facilities for employers and encourage some firms to develop on-site facilities. Firms have to be large enough to make the facility viable, i.e. have enough employees with children in need of child care. Thus, large firms will be those that provide on-site child care.

This nonrefundable tax credit has the potential to violate the principle of horizontal equity, which requires that similarly situated taxpayers should bear similar tax burdens. Mid- and small-sized firms may not have sufficient tax liability to be able to take advantage of the credit. Even for those firms that are able to claim the credit, they may not be able to claim the full amount because of limited tax liability.

Although the credit is contingent on non-discrimination in favor of more highly compensated employees, this provision, unlike child care tax benefits in general, may provide greater benefits to middle and upper income individuals because its relative cost effect is dependent on the size of the firm and not the income of the employees. Indeed, lower income employees may not be able to afford the higher quality child care facilities offered by some firms (although some employers subsidize costs for lower income workers).

Rationale

This provision was adopted as part of the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) and was designed to encourage on-site employer child care facilities.

Assessment

Specific subsidies for on-site employer-provided child care would be economically justified if there were a market failure that prevented firms from providing this service. Few firms offer such facilities, although small firms may not have enough potential clients to allow the center to be economically viable. The limit on the subsidy amount is intended to target smaller firms, but it is not clear why such activities are under-supplied by the market. Some research has suggested that on-site care produces benefits that firms may not take into account, such as reduced absenteeism and increased productivity, but not all evidence is consistent with that view. In addition, employers may be reluctant to commit to on-site child care because of uncertainties regarding costs and return. There is also some concern that employer-provided child care centers may create resentment among employees who are either childless or on a waiting list for admittance of their children to the center.

Some firms have also begun offering emergency or back-up care, which is a more limited proposition that may be more likely to reduce absenteeism. The credits may encourage more firms of larger size to provide these benefits, which may increase productivity because parents are not forced to stay home with a sick child or a child whose care giver is temporarily not available.

Selected Bibliography

"Deciding How to Provide Dependent Care Isn't Child's Play." *Personnel Journal*, v. 74, October 1995, p. 92.

Fitzpatrick, Christina Smith and Nancy Duff Campbell. "The Little Engine that Hasn't: The Poor Performance of Employer Tax Credits for Child Care." *National Women's Law Center*, November 2002.

Koniak, Jaime. "Should the Street Take Care? The Impact of Corporate-Sponsored Day Care on Business in the New Millenium." *Columbia Business Law Review*, 2002, pp. 193-222.

McIntyre, Lee. "The Growth of Work-Site Daycare." *Federal Reserve Bank of Boston Regional Review*, Vol. 10, No. 3, 2000, pp. 8-15.

Rosenberg, Lee Fletcher. "Child Care Benefits May Get Boost from Tax Credit." *Business Insurance*, Vol. 35, July 30, 2001, pp. 3, 34.

Rothausen, Teresa J, et al. "Family-Friendly Backlash — Fact or Fiction? The Case of Organizations' On-Site Child Care Centers." *Personnel Psychology*, v. 51 (Autumn 1998), pp. 685-706.

Woodward, Nancy Hatch. "Child Care to the Rescue." *HRMagazine,* Vol. 44, August 1999, pp. 82-84.

ADOPTION CREDIT AND EMPLOYEE ADOPTION BENEFITS EXCLUSION

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.4	-	0.4
2009	0.4	-	0.4
2010	0.4	-	0.4
2011	0.1	-	0.1
2012	([1])	-	([1])

([1]) Less than $50 million.

Authorization

Section 23, 137.

Description

The tax code provides a dollar-for-dollar adoption tax credit for qualified adoption expenses and an income tax exclusion of benefits received under employer-sponsored adoption assistance programs. Both have a limitation on qualified expenses ($12,150 in tax year 2009) that is indexed for inflation. The adoption tax credit is nonrefundable, but may be carried forward five years. Employer-provided adoption assistance benefits must be received under a written plan for an employer-sponsored adoption assistance program. Both the tax credit and income tax exclusion amounts are phased-out (allowable qualified adoption expenses are reduced) for taxpayers with high adjusted gross incomes. For tax year 2009, a taxpayer with modified adjusted gross income over $182,180 has qualified adoption expenses reduced. For a modified adjusted gross income of $222,180 or more, the qualified adoption expenses are reduced to zero. The phase-out range is adjusted for inflation. The adoption credit is allowed against the alternative minimum tax. Unlike some other tax exclusions, the exclusion for employer-

provided adoption assistance is only for the income tax. Benefits provided through an employer-provided adoption assistance program are subject to employment taxes.

Qualified adoption expenses include reasonable and necessary adoption fees, court costs, attorney fees, and other expenses directly related to a legal adoption of a qualified child. A qualified child is under age 18; or an individual of any age who is physically or mentally incapable of caring for themself. In the case of special needs adoptions, state required expenses such as construction, renovations, alterations, or other purchases may qualify as adoption expenditures. In the case of a special needs adoption, the maximum tax credit is allowed regardless of actual qualified adoption expenses. For domestic adoptions, qualified adoption expenses are eligible for the tax credit and income tax exclusion when incurred. For intercountry (foreign) adoptions, qualified adoption expenses are not eligible for the tax credit or income tax exclusion until after the adoption is finalized.

The provisions are unavailable for expenses related to surrogate parenting arrangements, or the adoption of a spouse's child. The provisions are also unavailable for expenditures contrary to State or federal law.

The code prohibits double benefits. Qualified adoption expenses cannot be used for both the adoption tax credit and the income tax exclusion. If a deduction or credit is taken for the qualified adoption expenses under other Internal Revenue Code sections, the adoption tax credit and income tax exclusion would not be available for any adoption expenses used for the other deduction of credit. The adoption tax credit or income tax exclusion is also not available for expenses paid by a grant received under a federal, State, or local program.

Married couples are generally required to file a joint tax return to be eligible for the credit. The Secretary of the Treasury is permitted to establish, by regulation, procedures to ensure that unmarried taxpayers who adopt a single child and who have qualified adoption expenses have the same dollar limitation as a married couple. The taxpayer is required to furnish the name, age, and Social Security number for each adopted child.

Impact

Both the tax credit and employer exclusion may reduce the costs associated with adoptions through lower income taxes for taxpayers whose incomes fall below the adjusted gross income level where qualified expenses are zero ($222,180 in tax year 2009). The tax credit is claimed by only a small proportion of taxpayers. For tax year 2006, less than .07% of tax returns claimed the adoption tax credit, with an average credit of $3,761. One factor limiting the use of the credit is the nonrefundable nature of the credit. The adoption tax credit is taken against tax liability after certain other

nonrefundable tax credits such as the child tax credit and the education credits.

Distribution by Income Class of the Adoption Credit in Tax Year 2006

Adjusted Gross Income Class (in thousands of $)	Percentage Distribution
Below $30	0.7
$30 to $50	8.8
$50 to $75	28.0
$75 to $100	18.3
$100 to $200	42.6
$200 and over	1.5

Source: Data compiled from IRS, *Individual Complete Report, Publication 1304*, Table 3.3.

Rationale

An itemized deduction was provided by the Economic Recovery Tax Act of 1981 (P.L. 97-34) to encourage, through the reduction of financial burdens, taxpayers who legally adopt children with special needs. The deduction was repealed with passage of the Tax Reform Act of 1986 (P.L. 99-514). The rationale for repeal was the belief that the deduction provided the greatest benefit to higher-income taxpayers and that budgetary control over assistance payments could best be handled by agencies with responsibility and expertise in the placement of special needs children.

The tax credit and income tax exclusion provisions for qualified adoption expenses were enacted by Congress as part of the Small Business Job Protection Act of 1996 (P.L. 104-188). The credit was enacted because of the belief that the financial costs associated with the adoption process should not be a barrier to adoptions.

The Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) increased the maximum qualified adoption expenses for the tax credit and income exclusion to $10,000 per eligible child, including special needs children. The act also extended the exclusion from income for employer provided adoption assistance and increased the beginning point of the income phase-out range to $150,000. Congressional reports noted that both the credit and exclusion had been successful in reducing the after-tax cost of adoption to affected taxpayers. It was felt that increasing the size of both the credit and exclusion and expanding the number of taxpayers who

qualify for the tax benefit would encourage more adoptions and allow more families to afford adoption. The legislation intended to make portions of the law permanent which were previously only temporary (those provisions will sunset after December 31, 2010).

Changes made by the Job Creation and Worker Assistance Act of 2002 (P.L. 107-147) were designed to clarify the provisions contained in the Economic Growth and Tax Relief Reconciliation Act of 2001.

Assessment

While federal tax assistance has been provided in the past for the placement of special needs children, both the current law tax credit and exclusion are more broadly based. The provisions apply to the vast majority of adoptions (that are not by family members), and are not targeted only to the adoptions of special needs children.

It appears that the credit and income tax exclusion are designed to provide tax relief to moderate income families for the costs associated with adoptions and to encourage families to seek adoptable children. Taxpayers with adjusted gross incomes of less than $182,180 (in tax year 2009) can receive the full tax exclusion or tax credit as long as they owe sufficient before-credit taxes. The phase-out applies only to those taxpayers whose adjusted gross incomes exceed $182,180 (in tax year 2009). It would appear that the rationale for the cap is that taxpayers whose incomes exceed $182,180 (in tax year 2009) have the resources for adoption so that the federal government does not need to provide special tax benefits for adoption to be affordable. The phase-out also reduces the revenue loss associated with these provisions.

The tax credit and income tax exclusion are in addition to a direct expenditure program which was first undertaken in 1986 to replace the tax deduction of that time. However, especially with regard to the carryforward feature of the tax credit, the need for a direct federal assistance program for adopting children with special needs may warrant re-examination. Under the tax provision's "double benefit" prohibition, the receipt of a grant will offset the tax credit or exclusion. The offset applies in all cases — including those for special needs children. Thus, it can be said that only in special needs adoption cases where a low or moderate income individual receives a grant greater than $5,000 could the benefit from receiving the grant exceed that of the tax credit for the same amount of out-of-pocket expenses.

Some have assumed that tax credits and direct government grants are similar, since both may provide benefits at specific dollar levels. However, some argue that tax credits are often preferable to direct government grants, because they provide greater freedom of choice to the taxpayer. Such freedoms include, for example, the timing of expenditures or the amount to spend, while government programs typically have more definitive rules and

regulations. Additionally, in the case of grants, absent a specific tax exemption, a grant may result in taxable income to the recipient.

Use of a tax mechanism does, however, add complexity to the tax system, since the availability of the credit and tax exclusion must be made known to all taxpayers, and space on the tax form must be provided (with accompanying instructions). The enactment of these provisions added to the administrative burdens of the Internal Revenue Service. A criticism of the tax deduction available under prior law was that the Internal Revenue Service had no expertise in adoptions and was therefore not the proper agency to administer a program of federal assistance for adoptions.

Selected Bibliography

Brazelton, Julia K. "Tax Implications of New Legislation Designed to Provide Adoption Incentives." *Taxes*, v. 75 (August 1997), pp. 426-436.

Cvach, Gary Q. and Martha Priddy Patterson. "Adoption Credit and Assistance Exclusion," *The Tax Adviser*, v. 28 (June 1997), pp. 359-360.

Foster, Sheila and Cynthia Bolt-Lee. "Changes in Tax Law Benefit Adopting Parents," *The CPA Journal*, v. 67 (October 1997), pp. 52-54.

Greenfield, Richard. "Tax Credits that are Not Child's Play," *The CPA Journal*, v. 69 (September 1999), pp. 61-62.

Henney, Susan M. "Adoption From Foster Care in a Sociocultural Context: An Analysis of Adoption Policies, Programs, and Legislation," Dissertation from The University of Texas at Austin, DAI, 62, no. 02A, (2000), 774 p.

Hollingsworth, Leslie Doty. "Adoption Policy in the United States: A Word of Caution," *Social Work*, v.45, no. 2 (Mar 2000), pp. 183-186.

Manewitz, Marilyn. "Employers Foster Assistance for Adoptive Parents," *HRMagazine*, v. 42 (May 1997), pp. 96-99.

O'Connor, M. "Federal Tax Benefits for Foster and Adoptive Parents and Kinship Caregivers: 2001 Tax Year," Seattle: Casey Family Programs, 2001, 19 p.

Scott, Christine, *Tax Benefits for Families: Adoption*, Library of Congress, Congressional Research Service Report RL33633, Washington, DC, 2008.

Smith, Sheldon R. "Tax Benefits for Adoption," *Tax Notes*, v. 95 (May 13, 2002), pp. 1065-1071.

— , Adoption Tax Benefits: Policy Considerations," *Tax Notes*, v. 91 (May 14, 2001), pp. 1159-1164.

Smith, Sheldon R. and Glade K. Tew. "The Adoption Exclusion: Complications for Employees," *Tax Notes*, v. 90 (Jan. 29, 2001), pp. 659-664.

U.S. Congress, House Committee on Ways and Means. *2004 Green Book; Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*," Committee Print, 108th Congress, 2d Session, March 2004, pp. 11-33 to 11-66.

U.S. Congress, House Committee on Ways and Means. *Adoption Promotion and Stability Act of 1996.* House Report 104-542, Part 2, 104th Congress, 2d session. Washington, DC: U.S. Government Printing Office, May 3, 1996.

U.S. General Accounting Office, *Child and Family Services Reviews: Better Use of Data and Improved Guidance Could Enhance HHS's Oversight of State Performance*, GAO Report GAO-04-333 (Washington: April 2004), pp. 1-55.

— , *Foster Care: States Focusing on Finding Permanent Homes for Children, but Long-Standing Barriers Remain*, GAO Testimony GAO-03-626T (Washington: April 8, 2003), pp. 1-24.

U.S. Treasury Department, Office of Tax Analysis, *Report to The Congress on Tax Benefits for Adoption*, October 2000, pp. 1-69.

U.S. Treasury Department, Office of Tax Analysis, *Federal Income Tax Benefits for Adoption: Use by Taxpayers*, 1999-2005, June 2007.

EXCLUSION OF CERTAIN FOSTER CARE PAYMENTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.7	-	0.7
2009	0.7	-	0.7
2010	0.8	-	0.8
2011	0.8	-	0.8
2012	0.9	-	0.9

Authorization

Section 131.

Description

Qualified foster care payments are excluded from the foster care provider's gross income. Qualified foster care payments are those payments made in carrying out a State or local government foster care program. The payments must be made by a State or local governmental agency or any qualified foster care placement agency for either of two purposes: (1) for caring for a qualified individual in the foster care provider's home. A "qualified foster individual" is defined as an individual placed by a qualified foster care placement agency, regardless of the individual's age at the time of placement.; or (2) additional compensation for additional care, provided in the foster care provider's home that is necessitated by an individual's physical, mental, or emotional handicap for which the State has determined that additional compensation is needed (referred to as a difficulty of care payment).

The exclusion for foster care payments is limited. Foster care payments, other than difficulty of care payments, are limited based on the number of

foster care individuals in the provider's home over age 18. Foster care payments made for more than five qualified foster care individuals aged 19 or older are not excluded from gross income.

For difficulty of care payments, there are two limitations. The first limitation is based on the number of foster care individuals under age 19. Difficulty of care payments made for more than 10 qualified foster care individuals under age 19 in the provider's home are not excluded from gross income. The second limitation is based on the number of foster care individuals in the provider's home over age 18. Difficulty of care payments made for more than five qualified foster care individuals aged 19 or older are not excluded from gross income.

The Internal Revenue Service has ruled that foster care payments excluded from income are not "earned income" for purposes of the Earned Income Tax Credit (EITC).

Impact

Both foster care and difficulty of care payments qualify for a tax exclusion. Since these payments are not counted as part of gross income, the tax savings reflect the marginal tax bracket of the foster care provider. Thus, the exclusion has greater value for taxpayers with higher incomes (and higher marginal tax rates) than for those with lower incomes (and lower marginal tax rates). In general, foster care providers who have other income, would receive a larger tax benefit than foster care providers without other income.

Rationale

In 1977, the Internal Revenue Service, in Revenue Ruling 77-280, 1977-2 CB 14, held that payments made by charitable child-placing agencies or governments (such as child welfare agencies) were reimbursements or advances for expenses incurred on behalf of the agencies or governments by the foster parents and therefore not taxable.

In the case of payments made to providers which exceed reimbursed expenses, the Internal Revenue Service ruled that the foster care providers were engaged in a trade or business with a profit motive and dollar amounts which exceed reimbursements were taxable income to the foster care provider.

The exclusion of foster care payments entered the tax law officially with the passage of the Periodic Payments Settlement Tax Act of 1982 (P.L. 97-473). That act codified the tax treatment of foster care payments and provided a tax exclusion for difficulty of care payments made to foster

parents who provide additional services in their homes for physically, mentally, or emotionally handicapped children.

In the Tax Reform Act of 1986 (P.L. 99-514), the provision was modified to exempt all qualified foster care payments from taxation. This change was made to relieve foster care providers from the detailed record-keeping requirements of prior law. Congress feared that detailed and complex record-keeping requirements might deter families from accepting foster children or from claiming the full tax exclusion to which they were entitled. This act also extended the exclusion of foster care payments to adults placed in a taxpayer's home by a government agency.

Under a provision included in the Job Creation and Worker Assistance Act of 2002 (P.L. 107-147), the definition of "qualified foster care payments" was expanded to include for-profit agencies contracting with State and local governments to provide foster home placements. The change was made in recognition that States often contract services out to for-profit firms and that the tax code had not recognized the role of private agencies in helping the States provide foster care services for placement and delivery of payments. The provisions are thought to reduce complexity with the hope that simpler rules may encourage more families to provide foster care services.

Assessment

It is generally conceded that the tax law treatment of foster care payments provides administrative convenience for the Internal Revenue Service, and prevents unnecessary accounting and record-keeping burdens for foster care providers. The trade-off is that to the extent foster care providers receive payments over actual expenses incurred, monies which should be taxable as income are provided an exemption from individual income and payroll taxation.

Both the General Accounting Office (1989) and James Bell Associates (1993; under contract from the Department of Health and Human Services) have reported a shortage of foster parents. Included among the reasons for this shortage are the low reimbursement rates paid to foster care providers, with some providers dropping out of the program because the low payment rates do not cover actual costs. Thus, to the extent that the exclusion promotes participation in the program, it is beneficial from a public policy viewpoint. However, data from the Department of Health and Human Services indicates that between FY1999 and FY2006, the number of children in foster care awaiting adoption has remained stable.

Selected Bibliography

U. S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986, H.R. 3838, 99th Congress, Public Law 99-514*. Washington, DC: U.S. Government Printing Office, May 4, 1987, pp. 1346-1347.

U.S. Department of Health and Human Services, Administration for Children & Families, *Children in Public Foster Care Waiting to be Adopted: FY 1999 thru FY 2006*, March, 2008, available at: [http://www.acf.hhs.gov/programs/cb/stats_research/afcars/waiting2006.htm].

U.S. General Accounting Office, *Child and Family Services Reviews: Better Use of Data and Improved Guidance Could Enhance HHS's Oversight of State Performance*, GAO Report GAO-04-333 (Washington: April 2004), pp. 1-55.

— , *Foster Care: States Focusing on Finding Permanent Homes for Children, but Long-Standing Barriers Rema*in, GAO Report GAO-03-626T (Washington: April 8, 2003), pp. 1-24.

TAX CREDIT FOR EMPLOYER-PROVIDED CHILD CARE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

([1])Less than $50 million.

Authorization

Section 45F.

Description

Employers are allowed a tax credit equal to 25 percent of qualified expenses for employee child care and 10 percent of qualified expenses for child care resource and referral services. Qualified child care expenses include the cost of acquiring, constructing, rehabilitating or expanding property used for a qualified child care facility, costs for the operation of the facility (including training costs and certain compensation for employees, and scholarship programs), or for contracting with a qualified child care facility to provide child care.

A qualified child care facility must have child care as its principal purpose and must meet all applicable State and local laws and regulations. A facility operated by a taxpayer is not a qualified child care facility unless, in addition to these requirements, the facility is open to all employees and, if qualified child care is the principal trade or business of the taxpayer, at least 30

percent of the enrollees at the facility are dependents of employees of the taxpayer. Use of a qualified child care facility and use of child care resource and referral services cannot discriminate in favor of highly paid employees.

The maximum total credit that may be claimed by a taxpayer cannot exceed $150,000 per taxable year. The credit is reduced by the amounts of any tax deduction claimed for the same expenditures. Any credit claimed for acquiring, constructing, rehabilitating, or expanding property is recaptured if the facility ceases to operate as a qualified child care facility, or for certain ownership transfers within the first 10 years. The credit recapture is a percentage, based on the year when the cessation as a qualified child care facility or transfer occurs.

Impact

A 25 percent credit is a very large tax subsidy which should significantly decrease the cost of on-site facilities for employers and encourage some firms to develop on-site facilities. Firms have to be large enough to make the facility viable, i.e. have enough employees with children in need of child care. Thus, large firms will be those that provide on-site child care.

This nonrefundable tax credit has the potential to violate the principle of horizontal equity, which requires that similarly situated taxpayers should bear similar tax burdens. Mid- and small-sized firms may not have sufficient tax liability to be able to take advantage of the credit. Even for those firms that are able to claim the credit, they may not be able to claim the full amount because of limited tax liability.

Although the credit is contingent on non-discrimination in favor of more highly compensated employees, this provision, unlike child care tax benefits in general, may provide greater benefits to middle and upper income individuals because its relative cost effect is dependent on the size of the firm and not the income of the employees. Indeed, lower income employees may not be able to afford the higher quality child care facilities offered by some firms (although some employers subsidize costs for lower income workers).

Rationale

This provision was adopted as part of the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) and was designed to encourage on-site employer child care facilities.

Assessment

Specific subsidies for on-site employer-provided child care would be economically justified if there were a market failure that prevented firms from providing this service. Few firms offer such facilities, although small firms may not have enough potential clients to allow the center to be economically viable. The limit on the subsidy amount is intended to target smaller firms, but it is not clear why such activities are under-supplied by the market. Some research has suggested that on-site care produces benefits that firms may not take into account, such as reduced absenteeism and increased productivity, but not all evidence is consistent with that view. In addition, employers may be reluctant to commit to on-site child care because of uncertainties regarding costs and return. There is also some concern that employer-provided child care centers may create resentment among employees who are either childless or on a waiting list for admittance of their children to the center.

Some firms have also begun offering emergency or back-up care, which is a more limited proposition that may be more likely to reduce absenteeism. The credits may encourage more firms of larger size to provide these benefits, which may increase productivity because parents are not forced to stay home with a sick child or a child whose care giver is temporarily not available.

Selected Bibliography

"Deciding How to Provide Dependent Care Isn't Child's Play." *Personnel Journal*, v. 74, October 1995, p. 92.

Fitzpatrick, Christina Smith and Nancy Duff Campbell. "The Little Engine that Hasn't: The Poor Performance of Employer Tax Credits for Child Care." *National Women's Law Center*, November 2002.

Koniak, Jaime. "Should the Street Take Care? The Impact of Corporate-Sponsored Day Care on Business in the New Millenium." *Columbia Business Law Review*, 2002, pp. 193-222.

McIntyre, Lee. "The Growth of Work-Site Daycare." *Federal Reserve Bank of Boston Regional Review*, Vol. 10, No. 3, 2000, pp. 8-15.

Rosenberg, Lee Fletcher. "Child Care Benefits May Get Boost from Tax Credit." *Business Insurance*, Vol. 35, July 30, 2001, pp. 3, 34.

Rothausen, Teresa J, et al. "Family-Friendly Backlash — Fact or Fiction? The Case of Organizations' On-Site Child Care Centers." *Personnel Psychology*, v. 51 (Autumn 1998), pp. 685-706.

Woodward, Nancy Hatch. "Child Care to the Rescue." *HRMagazine,* Vol. 44, August 1999, pp. 82-84.

DEDUCTION FOR CHARITABLE CONTRIBUTIONS, OTHER THAN FOR EDUCATION AND HEALTH

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	34.4	2.4	36.8
2009	35.9	2.5	38.4
2010	37.7	2.6	40.3
2011	40.2	2.6	42.8
2012	43.9	2.7	46.6

Authorization

Section 170 and 642(c).

Description

Subject to certain limitations, charitable contributions may be deducted by individuals, corporations, and estates and trusts. The contributions must be made to specific types of organizations: charitable, religious, educational, and scientific organizations, non-profit hospitals, public charities, and Federal, State, and local governments.

Individuals who itemize may deduct qualified contributions of up to 50 percent of their adjusted gross income (AGI) (30 percent for gifts of capital gain property). For contributions to non-operating foundations and organizations, deductibility is limited to the lesser of 30 percent of the taxpayer's contribution base, or the excess of 50 percent of the contribution base for the tax year over the amount of contributions which qualified for the 50 percent deduction ceiling (including carryovers from previous years). Gifts of capital gain property to these organizations are limited to 20 percent of AGI.

If a contribution is made in the form of property, the deduction depends on the type of taxpayer (*i.e.*, individual, corporate, etc.), recipient, and purpose.

The maximum amount deductible by a corporation is 10 percent of its adjusted taxable income. Adjusted taxable income is defined to mean taxable income with regard to the charitable contribution deduction, dividends-received deduction, any net operating loss carryback, and any capital loss carryback. Excess contributions may be carried forward for five years. Amounts carried forward are used on a first-in, first-out basis after the deduction for the current year's charitable gifts have been taken. Typically, a deduction is allowed only in the year in which the contribution occurs. However, an accrual-basis corporation is allowed to claim a deduction in the year preceding payment if its board of directors authorizes a charitable gift during the year and payment is scheduled by the 15th day of the third month of the next tax year.

As a result of the enactment of the American Jobs Creation Act of 2004, P.L. 108-357, donors of noncash charitable contributions face increased reporting requirements. For charitable donations of property valued at $5,000 or more, donors must obtain a qualified appraisal of the donated property. For donated property valued in excess of $500,000, the appraisal must be attached to the donor's tax return. Deductions for donations of patents and other intellectual property are limited to the lesser of the taxpayer's basis in the donated property or the property's fair market value. Taxpayers can claim additional deductions in years following the donation based on the income the donated property provides to the donee. The 2004 act also mandates additional reporting requirements for charitable organizations receiving vehicle donations from individuals claiming a tax deduction for the contribution, if it is valued in excess of $500.

Taxpayers are required to obtain written substantiation from a donee organization for contributions which exceed $250. This substantiation must be received no later than the date the donor-taxpayer filed the required income tax return. Donee organizations are obligated to furnish the written acknowledgment when requested with sufficient information to substantiate the taxpayer's deductible contribution.

The Pension Protection Act of 2006 (P.L. 109-280) included several provisions that temporarily expand charitable giving incentives. The provisions, effective after December 31, 2005 and before January 1, 2008, include enhancements to laws governing non-cash gifts and tax-free distributions from individual retirement plans for charitable purposes. The 2006 law also tightened rules governing charitable giving in certain areas, including gifts of taxidermy, contributions of clothing and household items, contributions of fractional interests in tangible personal property, and record-keeping and substantiation requirements for certain charitable contributions. Temporary charitable giving incentives were further extended by the

Economic Emergency Economic Stabilization Act of 2008 (P.L. 110-343) enacted in October 2008.

Impact

The deduction for charitable contributions reduces the net cost of contributing. In effect, the Federal Government provides the donor with a corresponding grant that increases in value with the donor's marginal tax bracket. Those individuals who use the standard deduction or who pay no taxes receive no benefit from the provision.

A limitation applies to the itemized deductions of high-income taxpayers. Under this provision, initially a phaseout applied which reduced itemized deductions by 3 percent of the amount by which a taxpayer's adjusted gross income (AGI) exceeds an inflation adjusted dollar amount ($166,800 in 2009). This phase out is, in turn being phased out, and in 2009 is reduced by two thirds. It is eliminated in 2010, but after that year the elimination of the phaseout expires, unless extended. The table below provides the distribution of all charitable contributions.

Distribution by Income Class of the Tax Expenditure for Charitable Contributions, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	0.1
$20 to $30	0.3
$30 to $40	0.8
$40 to $50	1.6
$50 to $75	6.6
$75 to $100	8.0
$100 to $200	27.5
$200 and over	55.2

Rationale

This deduction was added by passage of the War Revenue Act of October 3, 1917. Senator Hollis, the sponsor, argued that high wartime tax rates would absorb the surplus funds of wealthy taxpayers, which were generally contributed to charitable organizations.

The provisions enacted in 2004 resulted from Internal Revenue Service and congressional concerns that taxpayers were claiming inflated charitable deductions, causing the loss of federal revenue. In the case of vehicle donations, concern was expressed about the inflation of deductions. GAO reports published in 2003 indicated that the value of benefit to charitable organizations from donated vehicles was significantly less than the value claimed as deductions by taxpayers. The 2006 enactments were, in part, a result of continued concerns from 2004.

Assessment

Supporters note that contributions finance socially desirable activities. Further, the federal government would be forced to step in to assume some activities currently provided by charitable, nonprofit organizations if the deduction were eliminated. However, public spending might not be available to make up all of the difference. In addition, many believe that the best method of allocating general welfare resources is through a dual system of private philanthropic giving and governmental allocation.

Economists have generally held that the deductibility of charitable contributions provides an incentive effect which varies with the marginal tax rate of the giver. There are a number of studies which find significant behavioral responses, although a study by Randolph suggests that such measured responses may largely reflect transitory timing effects.

Types of contributions may vary substantially among income classes. Contributions to religious organizations are far more concentrated at the lower end of the income scale than contributions to hospitals, the arts, and educational institutions, with contributions to other types of organizations falling between these levels. However, the volume of donations to religious organizations is greater than to all other organizations as a group. For example, the American Association of Fund-Raising Counsel Trust for Philanthropy, Inc. estimated that giving to religious institutions amounted to 45 percent of all contributions ($93.2 billion) in calendar year 2005. This was in comparison to the next largest component of charitable giving recipients, educational institutions, at 14.8 percent ($38.56 billion).

Those who support eliminating this deduction note that deductible contributions are made partly with dollars which are public funds. They feel

that helping out private charities may not be the optimal way to spend government money.

Opponents further claim that the present system allows wealthy taxpayers to indulge special interests and hobbies. To the extent that charitable giving is independent of tax considerations, federal revenues are lost without having provided any additional incentive for charitable gifts. It is generally argued that the charitable contributions deduction is difficult to administer and adds complexity to the tax code.

Selected Bibliography

Aprill, Ellen P. "Churches, Politics, and the Charitable Contribution Deduction," *Boston College Law Review*, v. 42 (July 2001), pp. 843-873.

Boatsman, James R. and Sanjay Gupta. "Taxes and Corporate Charity: Empirical Evidence From Micro-Level Panel Data," *National Tax Journal*, v. 49 (June 1996), pp. 193-213.

Broman, Amy J. "Statutory Tax Rate Reform and Charitable Contributions: Evidence from a Recent Period of Reform," *Journal of the American Taxation Association*. Fall 1989, pp. 7-21.

Brown, Melissa S., Managing Editor *Giving USA 2004, The Annual Report on Philanthropy for the Year 2003*, American Association of Fund-Raising Counsel Trust for Philanthropy. Indiana University-Purdue University Indianapolis: 2004.

Buckles, Johnny Rex. "The Case for the Taxpaying Good Samaritan: Deducting Earmarked Transfers to Charity under Federal Income Tax Law, Theory and Policy," *Fordham Law Review*, v. 70 (March 2002), pp. 1243-1339.

Cain, James E., and Sue A. Cain. "An Economic Analysis of Accounting Decision Variables Used to Determine the Nature of Corporate Giving," *Quarterly Journal of Business and Economics,* v. 24 (Autumn 1985), pp. 15-28.

Clotfelter, Charles T. "The Impact of Tax Reform on Charitable Giving: A 1989 Perspective." In *Do Taxes Matter? The Impact of the Tax Reform Act of 1986*, edited by Joel Slemrod, Cambridge, Mass.: MIT Press, 1990.

— ."The Impact of Fundamental Tax Reform on Non Profit Organizations." In *Economic Effects of Fundamental Tax Reform*, Eds. Henry J. Aaron and William G. Gale. Washington, DC: Brookings Institution, 1996.

Colombo, John D. "The Marketing of Philanthropy and the Charitable Contributions Deduction: Integrating Theories for the Deduction and Tax Exemption," *Wake Forest Law Review*, v. 36 (Fall 2001), pp. 657-703.

Crimm, Nina J. "An Explanation of the Federal Income Tax Exemption for Charitable Organizations: A Theory of Risk Compensation," *Florida Law Review*, v. 50 (July 1998), pp. 419-462.

Cromer, Mary Varson. "Don't Give Me That!: Tax Valuation of Gifts to Art Museums," *Washington and Lee Law Review*, v. 6, Spring 2006, pp. 777-809.

Eason, Pat, Raymond Zimmermann, and Tim Krumwiede. "A Changing Environment in the Substantiation and Valuation of Charitable Contributions," *Taxes*, v. 74 (April 1996), pp. 251-259.

Feenberg, Daniel. "Are Tax Price Models Really Identified: The Case of Charitable Giving," *National Tax Journal*, v. 40, (December 1987), pp. 629-633.

Feldman, Naomi and James Hines, Jr. "Tax Credits and Charitable Contributions in Michigan," University of Michigan, Working Paper, October 2003.

Fisher, Linda A. "Donor-Advised Funds: The Alternative to Private Foundations," Cleveland Bar Journal, v. 72 (July/August 2001), pp. 16-17.

Fullerton, Don. *Tax Policy Toward Art Museums*. Cambridge, MA: National Bureau of Economic Research, 1990 (Working Paper no. 3379).

Gergen, Mark P. "The Case for a Charitable Contributions Deduction," *Virginia Law Review,* v. 74 (November 1988), pp. 1393-1450.

Gravelle, Jane. *Economic Analysis of the Charitable Contribution Deduction for Nonitemizers*, Library of Congress, Congressional Research Service Report RL31108, April 29, 2005.

-. *Tax Issues Relating to Charitable Contributions and Organizations*, Library of Congress, Congressional Research Service report RL34608, August 5, 2008.

Green, Pamela and Robert McClelland. "Taxes and Charitable Giving," *National Tax Journal*, v. 54 (Sept. 2001), pp. 433-450.

Gruber, Jonathan. "Pay or Pray? The Impact of Charitable Subsidies on Religious Attendance," *National Bureau of Economic Research Working Paper*, 10374, March, 2004, pp. 1-40.

Izzo, Todd. "A Full Spectrum of Light: Rethinking the Charitable Contribution Deduction," *University of Pennsylvania Law Review*, v. 141 (June 1993), pp. 2371-2402.

Jacobson, Rachel. "The Car Donation Program: Regulating Charities and For-Profits," *The Exempt Organization Tax Review*, v. 45, August 2004, pp. 213-229.

Jones, Darryll K. "When Charity Aids Tax Shelters," *Florida Tax Review*, v. 4 (2001), pp. 770-830.

Joulfaian, David and Mark Rider. "Errors-In-Variables and Estimated Income and Price Elasticities of Charitable Giving," *National Tax Journal*, v. 57 (March 2004), pp. 25-43.

Kahn, Jefferey H. "Personal Deductions: A Tax "Ideal" or Just Another "Deal"?," *Law Review of Michigan State University*, v. 2002 (Spring 2002), pp. 1-55.

Krumwiede, Tim, David Beausejour, and Raymond Zimmerman. "Reporting and Substantiation Requirements for Charitable Contributions," *Taxes*, v. 72 (January 1994), pp. 14-18.

Omer, Thomas C. "Near Zero Taxable Income Reporting by Nonprofit Organizations," *Journal of American Taxation Association*, v. 25, Fall 2003, pp. 19-34.

O'Neil, Cherie J., Richard S. Steinberg, and G. Rodney Thompson. "Reassessing the Tax-Favored Status of the Charitable Deduction for Gifts of Appreciated Assets," *National Tax Journal*, v. 49 (June 1996), pp. 215-233.

Randolph, William C. "Charitable Deductions," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

— . "Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions," *Journal of Political Economy*, v. 103 (August 1995), pp. 709-738.

Robinson, John R. "Estimates of the Price Elasticity of Charitable Giving: A Reappraisal Using 1985 Itemizer and Nonitemizer Charitable Deduction Data," *Journal of the American Taxation Association*. Fall 1990, pp. 39-59.

Smith, Bernard. "Charitable Contributions: A Tax Primer," *Cleveland Bar Journal*, v. 72 (Nov. 2000), pp. 8-11.

Stokeld, Fred, "ETI Repeal Bill Would Tighten Rules on Vehicle, Patent Donations," *Tax Notes*, October 18, 2004, pp. 293-294.

Teitell, Conrad. "Tax Primer on Charitable Giving," *Trust & Estates*, v. 139, (June 2000), pp. 7-16.

Tiehen, Laura. "Tax Policy and Charitable Contributions of Money," *National Tax Journal*, v. 54 (Dec 2001), pp. 707-723.

Tobin, Philip T. "Donor Advised Funds: A Value-Added Tool for Financial Advisors," *Journal of Practical Estate Planning*, v. 3 (October/November 2001), pp. 26-35, 52.

U.S. Congress, Congressional Budget Office. Budget Options. See Rev-12, Limit Deductions for Charitable Giving to the Amount Exceeding 2 Percent of Adjusted Gross Income. Washington, DC: Government Printing Office (February 2005), p 281.

U.S. Congress, Government Accountability Office. *Vehicle Donations: Benefits to Charities and Donors, but Limited Program Oversight*, GAO Report GAO-04-73, Washington, DC: U.S. Government Printing Office, November 2003, pp. 1-44.

— . *Vehicle Donations: Taxpayer Considerations When Donating Vehicles to Charities,* GAO Report GAO-03-608T, Washington, DC: U.S. Government Printing Office, April 2003, pp. 1-15.

U.S. Congress, Joint Committee on Taxation, *Technical Explanation Of H.R. 4, The "Pension Protection Act Of 2006,"* as Passed by the House on July 28, 2006, and as Considered by the Senate on August 3, 2006, JCX-38-06, Washington, DC: U.S. Government Printing Office, August3, 2006, pp. 1-386.

— , Senate Committee on Finance. *Staff Discussion Draft: Proposals for Reforms and Best Practices in the Area of Tax-Exempt Organization*s, Washington, DC: U.S. Government Printing Office, June 22, 2004, pp. 1-19.

Wittenbach, James L. and Ken Milani. "Charting the Interacting Provisions of the Charitable Contributions Deductions for Individuals," *Taxation of Exempts*, v. 13 (July/August 2001), pp. 9-22.

U.S. Department of Treasury. "Charitable Giving Problems and Best Practices," *testimony given by Mark Everson, Commissioner of Internal Revenue*, Internal Revenue Service, IR-2004-81, Washington, DC: U.S. Government Printing Office, June 22, 2004, pp. 1-17.

Yetman, Michelle H. and Robert J. Yetman. "The Effect of Nonprofits' Taxable Activities on the Supply of Private Donations," *National Tax Journal*, v. 56, March 2003, pp. 243-258.

—. "Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions," *Journal of Political Economy*, v. 103 (August 1995), pp. 709-738.

TAX CREDIT FOR DISABLED ACCESS EXPENDITURES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2006	([1])	([1])	([1])
2007	([1])	([1])	([1])
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])

([1])Positive tax expenditure of less than $50 million.

Authorization

Section 44.

Description

A nonrefundable tax credit equal to 50 percent of eligible access expenditures is provided to small businesses, defined as those with gross receipts of less than $1 million or those with no more than 30 full-time employees. Eligible access expenditures must exceed $250 in costs to be eligible but expenditures which exceed $10,250 are not eligible for the credit. The expenditures must be incurred to make a business accessible to disabled individuals.

The credit is included as a general business credit and subject to present law limits. No further deduction or credit is permitted for amounts allowable as a disabled-access credit. No increase in the property's adjusted basis is allowable to the extent of the credit. The credit may not be carried back to tax years before the date of enactment.

In 2002, the Internal Revenue Service (IRS) issued an alert (Internal Revenue News Release 2002-17) to taxpayers concerning a fraudulent disabled access credit scheme. That scheme involves the sale of coin-operated pay telephones to individual investors. Investors were advised incorrectly that they were entitled to claim the disabled access credit of up to $5,000 on their individual income tax returns because the telephone is equipped with a volume control. The IRS disallows this credit if claimed by a taxpayer who is not operating as a business or who does not qualify as an eligible small business and if the purchase does not make a business accessible to disabled individuals. The IRS has continued to issue the alert, including a notice in March 2006 (Internal Revenue News Release IR-2006-45).

Impact

The provision lessens the after-tax cost to small businesses for expenditures to remove architectural, communication, physical, or transportation access barriers for persons with disabilities by providing a tax credit for expenditures (which exceed $250 but are less than $10,250). The tax credit allows taxpayers to reduce tax liability by the cost of qualified expenditures.

The value of this tax treatment is twofold. First, a 50-percent credit is greater than the tax rate of small businesses. Thus, a greater reduction in taxes is provided by the credit than through immediate expensing of access expenditures. Second, the value to small businesses is increased by the amount to which the present value of the tax credit exceeds the present value of periodic deductions which typically could be taken over the useful life of the capital expenditure. The direct beneficiaries of this provision are small businesses that make access expenditures.

Rationale

This tax credit was added to the Code with the passage of the Revenue Reconciliation Act of 1990 (P.L. 101-508). The purpose was to provide financial assistance to small businesses for compliance with the Americans With Disabilities Act of 1990 (ADA; P.L. 101-336). For example, that act requires restaurants, hotels, and department stores that are either newly constructed or renovated to provide facilities that are accessible to persons with disabilities, and calls for removal of existing barriers when readily achievable in facilities previously built.

While the provision encourages compliance with ADA, subsequent access improvements are not covered by the provision. A 2004 IRS ruling (Internal Revenue Service Memorandum 200411042) clarified that eligible small businesses already in compliance with the ADA may not claim the disabled

access credit for expenditures paid or incurred for the purpose of upgrading or improving disabled access.

Assessment

A firm's ability to benefit from the credit is dependent on its income tax liability. Some firms may not have sufficient tax liability to be able to take advantage of the credit, and for those firms that are able to claim the credit, some may not be able to claim the full amount.

The tax credit may not be the most efficient method for accomplishing the objective because some of the tax benefit will go for expenditures the small business would have made absent the tax benefit and because there is arguably no general economic justification for special treatment of small businesses over large businesses.

Alternatively, the requirements of the Americans with Disabilities Act placed capital expenditure burdens that may be a hardship to small businesses. These rules are designed primarily for social objectives, *i.e.* to accommodate persons with disabilities; thus proponents assert that the subsidy is justified in this instance.

Selected Bibliography

Bullock, Reginald Jr. "Tax Provisions of the Americans with Disabilities Act," *The CPA Journal*, v. 63, no. 2, (February 1993), pp. 58-59.

Cook, Ellen D., Anne K. Judice, and J. David Lofton. "Tax Aspects of Complying with the Americans with Disabilities Act," *The CPA Journal*, v. 66 (May 1996), pp. 38-42.

Cook, Ellen D. and Anita C. Hazelwood. "Tax Breaks Cut the Cost of Americans With Disabilities Act Compliance," *Practical Tax Strategies*, v. 69 (Sept 2002), pp. 145-155.

Eisenstadt, Deborah E. "Current Tax Planning for Rehabilitation Expenses, Low-Income Housing, and Barrier Removal Costs," *Taxation for Accountants*, v. 34 (April 1985), pp. 234-238.

Ellentuck, Albert B. "Credit for Compliance," *Nation's Business*, v. 79, (April 1991), p. 60.

Jackson, Pamela J. *Business Tax Provisions that Benefit Persons with Disabilities*, Library of Congress, Congressional Research Service Report RS21006, Washington, DC: June 28, 2005.

Lebow, Marc I., Wayne M. Schell, and P. Michael McLain. "Not All Expenditures to Aid the Disabled Qualify for Credit," *The Tax Adviser*, v. 32, (December 2001), pp. 810-811.

TAX CREDIT FOR CHILDREN UNDER AGE 17

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	47.6	-	47.6
2009	45.9	-	45.9
2010	45.2	-	45.2
2011	21.4	-	21.4
2012	13.3	-	13.3

Authorization

Section 24.

Description

Families with qualifying children are allowed a credit against their federal individual income tax of $1,000 per qualifying child.

To qualify for the credit the child must be an individual for whom the taxpayer can claim a dependency exemption. That means the child must be the son, daughter, grandson, granddaughter, stepson, stepdaughter or an eligible foster child of the taxpayer. The child must be under the age of 17 at the close of the calendar year in which the taxable year of the taxpayer begins.

The child tax credit is phased out for taxpayers whose adjusted gross incomes (AGIs) exceed certain thresholds. For married taxpayers filing joint returns, the phaseout begins at AGI levels in excess of $110,000, for married couples filing separately the phaseout begins at AGI levels in excess of $55,000, and for single individuals filing as either heads of households or as singles the phaseout begins at AGI levels in excess of $75,000. The child tax credit is phased out by $50 for each $1,000 (or fraction thereof) by which the

taxpayer's AGI exceeds the threshold amounts. Neither the child tax credit amount nor the phaseout thresholds are indexed for inflation.

The child tax credit is refundable. For families with less than three qualifying children, the maximum refundable credit cannot exceed 15% of a taxpayer's earned income in excess of a given income threshold. For 2008, the income threshold is $8,500. This threshold value is an exception, authorized by the Emergency Economic Stabilization Act of 2008 (P.L. 110-343) for a single year. Otherwise the threshold in 2008 would have been $12,050, which would have limited eligibility for lower income taxpayers and reduced the refundable amounts for many recipients. In 2009, the threshold will be $12,550 under current law due to indexation for inflation.

For families with three or more children, the maximum refundable credit is limited to the extent that the taxpayer's Social Security taxes and income taxes exceed the taxpayer's earned income tax credit or to the extent of 15% of their earned income in excess of income threshold. In these cases, the taxpayer can use whichever method results in the largest refundable credit.

The child tax credit can be applied against both a taxpayer's regular income tax and alternative minimum tax liabilities.

Impact

The child tax credit will benefit all families with qualifying children whose incomes fall below the AGI phaseout ranges.

Distribution by Income Class of the Tax Credit for Children Under Age 17, 2007

Income Class (in thousands of $)	Percentage of Amount
Below $10	0.7
$10 to $20	3.3
$20 to $30	9.9
$30 to $40	12.8
$40 to $50	11.9
$50 to $75	22.5
$75 to $100	17.9
$100 to $200	21.0
$200 and over	0.0

Rationale

The child tax credit was enacted as part of the Taxpayer Relief Act of 1997. Initially, for tax year 1998, families with qualifying children were allowed a credit against their federal income tax of $400 for each qualifying child. For tax years after 1998, the credit increased to $500 for each qualifying child. The credit was refundable, but only for the families with three or more children.

Congress indicated that the tax structure at that time did not adequately reflect a family's reduced ability to pay as family size increased. The decline in the real value of the personal exemption over time was cited as evidence of the tax system's failure to reflect a family's ability to pay. Congress further believed that the child tax credit would reduce a family's tax liabilities, would better recognize the financial responsibilities of child rearing, and promote family values.

The amount and coverage of the child tax credit was substantially increased by the Economic Growth and Tax Relief Reconciliation Act of 2001 and subsequent legislation. Proponents of this increase argued that a $500 child tax credit was inadequate. It was argued that the credit needed to be increased in order to better reflect the reduced ability to pay taxes of families with children. Furthermore, many felt that the credit should be refundable for all families with children.

The 2001 Act increased the child tax credit to $1,000 with the increase scheduled to be phased in between 2001and 2010. It also made the credit refundable for families with less than three children. The Jobs and Growth Tax Relief Reconciliation Act of 2003 increased the child tax credit to $1,000 for tax years 2003 and 2004. The Working Families Tax Relief Act of 2004 effectively extended the $1,000 child tax credit through 2010. The 2004 act also authorized inclusion of combat pay, which is not subject to income taxes, in earned income for purposes of calculating the refundable portion of the credit, which may increase the amount of the credit.

The Katrina Emergency Tax Relief Act of 2005 allowed taxpayers affected by hurricanes Katrina, Rita, and Wilma to use their prior year's (2004) earned income to compute the amount of their 2005 refundable child credit.

Under current law, the changes made by the 2001 act will sunset at the end of 2010. For tax years beyond 2010, the child tax credit will revert to its pre-2001 law levels and refundability rules.

Assessment

Historically, the federal income tax has differentiated among families of different size through the combined use of personal exemptions, child care credits, standard deductions, and the earned income tax credit. These provisions were modified over time so that families of differing sizes would not be subject to federal income tax if their incomes fell below the poverty level.

The child tax credit enacted as part of the Taxpayer Relief Act of 1997, and expanded upon in the 2001, 2003, and 2004 tax Acts, represents a departure from past policy practices because it is not designed primarily as a means of differentiating between low-income families of different size, but rather is designed to provide general tax reductions to middle income families. The empirical evidence, however, suggests that for families in the middle and higher income ranges, the federal tax burden has remained relatively constant over the past 15 years.

Selected Bibliography

Esenwein, Gregg. "Child Tax Credit," *Encyclopedia of Taxation and Tax Policy*, Ed. Joseph J. Cordes, Robert D. Ebel and Jane G. Gravelle. The Urban Institute, Washington D.C. 2005.

Gravelle, Jane G. and Jennifer Gravelle. "Horizontal Equity and Family Tax Treatment: The Orphan Child of Tax Policy". *National Tax Journal*, September 2006.

Burman, Leonard E. and Laura Wheaton, "Who Gets the Child Tax Credit?" *Tax Notes*, October 17, 2005.

Shvedov, Maxim, The Child Tax Credit,. Library of Congress. Congressional Research Service Report RL34715. 2006.

Esenwein, Gregg A. *The Child Tax Credit After the Economic Growth and Tax Relief Reconciliation Act of 2001* . Library of Congress, Congressional Research Service Report RS20988, (Washington, DC, 2008).

U.S. Department of the Treasury. Internal Revenue Service. *Child Tax Credit*. Publication 972. 2005.

U.S. Congress, Joint Committee on Taxation. *Technical Explanation of H.R. 3768, The "Katrina Emergency Tax Relief Act of 2005."* JCX-69-05. September 2005.

-, Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in the 107th Congress*. January 2003.

-, Joint Committee on Taxation. *Summary of the Provisions Contained in the Conference Agreement for H.R. 1836, The Economic Growth and Tax Relief Reconciliation Act of 2001*. May 2001.

-, House of Representatives. *Ticket to Work and Work Incentives Improvement Act of 1999.* Conference Report 106-478, November 1999.

-, Joint Committee on Taxation. *General Explanation of Tax Legislation Enacted in 1997*. December 1997.

HEALTH SAVINGS ACCOUNTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.5	-	0.5
2009	0.7	-	0.7
2010	0.9	-	0.9
2011	1.2	-	1.2
2012	1.6	-	1.6

Authorization

Section 223.

Description

Health Savings Accounts (HSAs) are a tax-advantaged way that people can pay for unreimbursed medical expenses such as deductibles, copayments, and services not covered by insurance. Eligible individuals can establish and fund these accounts when they have qualifying high deductible health insurance (insurance with a deductible of at least $1,150 for single coverage and $2,300 for family coverage, plus other criteria described below) and no other health care coverage, with some exceptions. The minimum deductible levels do not apply to preventive care, which the IRS has defined by regulation. Prescription drugs are not exempt from the deductibles unless they are for preventive care. Qualifying health plans cannot have limits on out-of-pocket expenditures that exceed $5,800 for single coverage and $11,600 for family coverage. (The dollar amounts in this and other paragraphs are for 2009.)

The annual contribution limit for single coverage is $3,000 and the annual contribution limit for family coverage is $5,950. Individuals who are at

least 55 years of age but not yet enrolled in Medicare may make an additional contribution of $1,000 each year. Individuals may deduct their HSA contributions from gross income in determining their taxable income. Employer contributions are excluded from income and employment taxes of the employee and from employment taxes of the employer.

Individuals do not lose their HSA or the right to access it by obtaining insurance with a low deductible; they simply cannot make further contributions until they become eligible once again. Individual members of a family may have their own HSA, provided they each meet the eligibility rules. They can also be covered through the HSA of someone else in the family; for example, a husband may use his HSA to pay expenses of his spouse even though she has her own HSA.

Withdrawals from HSAs are exempt from federal income taxes if used for qualified medical expenses, with the exception of health insurance premiums. However, payments for four types of insurance are considered to be qualified expenses: (1) long-term care insurance, (2) health insurance premiums during periods of continuation coverage required by federal law (e.g., COBRA), (3) health insurance premiums during periods the individual is receiving unemployment compensation, and (4) for individuals age 65 years and older, any health insurance premiums (including Medicare Part B premiums) other than a Medicare supplemental policy.

Withdrawals from HSAs not used for qualified medical expenses are included in the gross income of the account owner in determining federal income taxes; they also are subject to a 10% penalty tax. The penalty is waived in cases of disability or death and for individuals age 65 and older. HSA account earnings are tax-exempt and unused balances may accumulate without limit.

Under legislation adopted at the end of 2006, amounts can be rolled over from Health Flexible Spending Accounts and Health Reimbursement accounts on a one time basis before 2012. Amounts can also be withdrawn from an IRA and contributed to an HSA without tax or penalty.

Impact

HSAs encourage people to purchase high deductible health insurance and build a reserve for routine and other unreimbursed health care expenses. They are more attractive to individuals with higher marginal tax rates since their tax savings are greater, though some younger, lower income taxpayers might try to build up account balances in anticipation of when their income will be higher. Some higher income individuals may be reluctant to start or continue funding HSAs if they have health problems for which low deductible insurance would be more appropriate.

Interest in HSAs continues to grow in both the employer and individual health insurance markets. Qualifying insurance was initially offered by insurers that previously had been selling high deductible policies (including policies associated with medical savings accounts, a precursor to HSAs), but today many insurers and even some health maintenance organizations offer qualifying coverage. Some of the first employers to offer HSA plans had previously had health reimbursement accounts (HRAs) that were coupled with high deductible coverage. (First authorized by the IRS in 2002, HRAs are accounts that employees can use for unreimbursed medical expenses; they can be established and funded only by employers and normally terminate when employees leave.) More employers became interested after the IRS issued guidance clarifying how HSA statutory provisions would be interpreted. The federal government began offering HSA plans to its employees in 2005.

According to a survey by America's Health Insurance Plans (AHIP), as of January, 2008, nearly 6.1 million people were enrolled in qualifying high deductible insurance plans. (AHIP is a national trade association that represents most health insurance carriers.) The number included both policy holders and their covered family members. The January, 2008 figure was nearly twice a March, 2006 count. While not all these policy holders have HSAs, let alone put money in them, it is reasonable to assume that the number of HSAs has been growing rapidly. Nonetheless, it remains uncertain how popular HSAs will be in the long run. While most people who consider them could reasonably expect to have gradually increasing account balances, it is unclear whether this incentive will be enough to offset the increased risks associated with high deductible insurance.

About three-quarters of the 6.1 million people identified in the AHIP survey had group market insurance (essentially, employment-based insurance), while about one-quarter had individual market coverage. Within the group market, about 60 percent had large group coverage (51 or more employees) and about 40 percent had small group coverage (50 or fewer employees). However, between January 2007 and January 2008 the fastest growing market for HSA qualified plans was in the small group market. The Survey of Employer Health Benefits conducted by the Kaiser Family Foundation and the Health Research and Educational Trust (Kaiser/HRET) indicates that in 2008 about 11 percent of private sector firms that offered health benefits offered an HSA-qualified plan.

The Kaiser/HRET survey also indicated that in 2008 employers contributed an average of $838 to HSAs for employees with single coverage and an average of $1,522 to HSAs for employees with family coverage. (The estimates are based upon firms that made contributions; approximately 28 percent of firms made no contribution.) Reliable data on the size of HSA balances are not available from published sources.

Rationale

HSAs were authorized by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (P.L. 108-173). Congress adopted them as a replacement for Archer medical savings accounts (MSAs), which proponents considered unduly constrained by limitations on eligibility and contributions. Archer MSAs, which are still available, are restricted to self-employed individuals and employees covered by a high deductible plan established by their small employer (50 or fewer workers). MSA contributions are limited to 65 percent of the insurance deductible (75% for family policies) or earned income, whichever is less. Individuals cannot make contributions if their employer does. Only about 100,000 MSAs have ever been established. Like MSAs, HSAs were advanced as a way to slow the growth of health care costs by reducing reliance on insurance, to preserve freedom of choice in obtaining health care services, and to help individuals and families finance future health care costs. Taxpayers can carry their HSAs with them when they change jobs, which, in theory, may help maintain continuity of health care if their new employer offers different or perhaps no health insurance coverage.

HSAs are seen as the cornerstone of consumer driven health care, which some employers hope will limit their exposure to rising health care costs. Some health care providers favor consumer driven health care in order to avoid managed care restrictions on how they practice medicine. HSAs are predicated upon market-based rather than regulatory solutions to health care problems, as the 108th Congress appeared to favor.

The extent to which the 111th Congress will continue with this approach remains to be seen. If Congress undertakes health care reform, consumer driven health care might be given greater weight, though perhaps with more regulatory controls. On the other hand, some comprehensive reforms might reduce the discretion consumers have under high deductible plans.

Assessment

HSAs could be an attractive option for many people. They allow individuals to insure against large or catastrophic expenses while covering routine and other minor costs out of their own pocket. Properly designed, they may encourage more prudent health care use and the accumulation of funds for medical emergencies. For these outcomes to occur, however, individuals will have to put money into their account regularly (especially if their employer doesn't) and refrain from spending it for things other than health care. In addition, they must be able to find out what health care providers charge and be willing to switch to lower-cost providers. Despite some promising small-scale studies and anecdotal evidence, it is too early to tell whether many people would respond in these ways, or if health care providers will be forthcoming about prices.

One issue surrounding HSAs is whether they drive up insurance costs for everyone else. If HSAs primarily attract young, healthy individuals, premiums for plans without high deductibles are likely to rise since they would disproportionately cover the older and ill. Over time, healthier people in higher cost plans would switch to lower cost plans, raising those premiums but increasing premiums in higher cost plans even more. If this process continued unchecked, eventually people who need insurance the most would be unable to afford it. However, it might be possible to couple HSAs with coverage that does not have high deductibles, just as tax incentives could be designed to attract older, less healthy people.

HSAs have limits on their capacity to substantially reduce aggregate health care spending, even assuming their widespread adoption and significant induction (price elasticity) effects of insurance. Most health care spending is attributable to costs that exceed the high-deductible levels allowed under the legislation; consumers generally have little control over these expenditures. Even for smaller expenditures, the tax subsidies associated with HSAs may effectively reduce patient cost-sharing compared to typical comprehensive health insurance. A further complication is that HSAs with large account balances (which will eventually occur for some people) might be seen as readily-available funds for health care, which could lead to *increases* in spending, just the opposite of the usual prediction.

Regardless of their impact on aggregate expenditures, HSAs provide more economically equitable treatment for taxpayers who choose to self-insure more of their health care costs. Employer-paid health insurance is excluded from employees' gross income regardless of the proportion of costs it covers. Employers generally pay about 80% of the cost of a plan that has a low deductible ($400 a year, for example) and a 20% copayment requirement. If the plan instead had a high-deductible ($2,000, for example) and the same copayment requirement, employees normally would have to pay for expenses associated with the increase in the deductible ($1,600 minus the $320 copayment they would otherwise have made) with after-tax dollars. They would lose a tax benefit for assuming more financial risk. HSAs restore this benefit as long as an account is used for health care expenses. In this respect, HSAs are like flexible spending accounts (FSAs), which also allow taxpayers to pay unreimbursed health care expenses with pre-tax dollars. With FSAs, however, account balances unused at the end of the year and a brief grace period must be forfeited.

Selected Bibliography

America's Health Insurance Plans. *A Survey of Preventive Benefits in Health Savings Account (HSA) Plans, July 2007*. AHIP Center for Policy and Research (November 2007).

——————— — *January 2008 Census Shows 6.1 Million People Covered by HSA/High-Deductible Health Plans*. AHIP Center for Policy and Research. (April 2008)

Aaron, Henry J. The "Sleeper" in the Drug Bill. *Tax Notes*. v. 102 no. 8 (February 23, 2004).

Baicker, Katherine et. al., Lowering the Barriers to Consumer-Directed Health Care: Responding to Concerns. *Health Affairs.* vol 25 no. 5 (2008).

Bloche, M. Gregg. Consumer-Driven Health Care and the Disadvantaged. *Health Affairs*. vol. 26 no 5. (2007).

Buntin, Melinda Beeuwkes et al. Consumer-Directed Health Care: Early Evidence About Effects on Cost and Quality. *Health Affairs.* vol. 25 (2006).

Cannon, Michael F. *Health Savings Accounts: Do the Critics Have a Point?* Cato Institute. Policy Analysis no. 569 (May 30, 2006).

Coyle, Dan. The Fine Print on HSAs. *Benefits Quarterly.* vol 24. no. 4 (2008).

Gabel, Jon R. et al. Employers' Contradictory Views about Consumer-Driven Health Care: Results from a National Survey. *Health Affairs,* Web exclusive (April 21, 2004).

Hall, Mark A. and Clark C. Havighurst. Reviving Managed Care with Health Savings Accounts. *Health Affairs.* vol. 24 (2005).

Herzlinger, Regina E. Consumer-Driven Health Care: Lessons from Switzerland. *JAMA*, v. 292 no. 10 (September 8, 2004).

Lyke, Bob. *Health Savings Accounts: Overview of Rules for 2008.* Library of Congress. Congressional Research Service. Report RL33257 (2008).

————*Health Savings Accounts: Some Current Policy Issues.* Library of Congress. Congressional Research Service. Report RS22437 (2006).

————, Chris Peterson, and Neela Ranade. *Health Savings Accounts.* Library of Congress. Congressional Research Service Report RL32467 (2005).

Protecting Consumers in an Evolving Health Insurance Market. National Committee for Quality Assurance. (June, 2006).

Rapaport, Carol. *Health Savings Accounts and High-Deductible Health Plans: A Data Primer*. Library of Congress. Congressional Research Service. Report RS22877 (2008).

Remler, Dahlia K. and Sherry A. Glied. How Much More Cost-Sharing Will Health Savings Accounts Bring? *Health Affairs.* vol. 25 (2006).

Richardson, David P. and Jason S. Seligman. Health Savings Accounts: Will They Impact Markets? *National Tax Journal.* vol. 60 no. 3 (2007).

Trude, Sally and Leslie Jackson Conwell. *Rhetoric vs. Reality: Employer Views on Consumer-Driven Health Care.* Center for Studying Health System Change. Issue Brief no. 86. (July, 2004).

U.S. Government Accountability Office: *Consumer-Directed Health Plans: Early Enrollee Experiences with Health Savings Accounts and Eligible Health Plans.* GAO-06-798 (August, 2006).

————*Consumer-Directed Health Plans: Small but Growing Enrollment Fueled by Rising Cost of Health Care Coverage.* GAO-06-514. (April, 2006).

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT BONDS FOR PRIVATE NONPROFIT HOSPITAL FACILITIES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.5	0.6	2.1
2009	1.6	0.6	2.4
2010	1.7	0.7	2.4
2011	1.9	0.7	2.6
2012	2.0	0.8	2.8

Authorization

Section 103, 141, 145(b), 145(c), 146, and 501(c)(3).

Description

Interest income on State and local bonds used to finance the construction of nonprofit hospitals and nursing homes is tax exempt. These bonds are classified as private-activity bonds rather than governmental bonds because a substantial portion of their benefits accrues to individuals or businesses rather than to the general public. For more discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

These nonprofit hospital bonds are not subject to the State private-activity bond annual volume cap.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to finance hospitals and nursing homes at reduced interest rates.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and users of the hospitals and nursing homes, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Pre-dating the enactment of the first Federal income tax, an early decision of the U.S. Supreme Court, *Dartmouth College v. Woodward* (17 U.S. 518 [1819]), confirmed the legality of government support for charitable organizations that were providing services to the public.

The income tax adopted in 1913, in conformance with this principle, exempted from taxation virtually the same organizations now included under Section 501(c)(3). In addition to their tax-exempt status, these institutions were permitted to receive the benefits of tax-exempt bonds. Almost all States have established public authorities to issue tax-exempt bonds for nonprofit hospitals and nursing homes. Where issuance by public authority is not feasible, Revenue Ruling 63-20 allows nonprofit hospitals to issue tax-exempt bonds "on behalf of" State and local governments.

Before enactment of the Revenue and Expenditure Control Act of 1968, States and localities were able to issue bonds to finance construction of capital facilities for private (proprietary or for-profit) hospitals, as well as for public sector and nonprofit hospitals.

After the 1968 Act, tax-exempt bonds for proprietary (for-profit) hospitals were issued as small-issue industrial development bonds, which limited the amount for any institution to $5 million over a six-year period. The Revenue Act of 1978 raised this amount to $10 million.

The Tax Equity and Fiscal Responsibility Act of 1982 established December 31, 1986 as the sunset date for tax-exempt small-issue industrial development bonds. The Deficit Reduction Act of 1984 extended the sunset date for bonds used to finance manufacturing facilities, but left in place the December 31, 1986 sunset date for nonmanufacturing facilities, including for-profit hospitals and nursing homes.

The private-activity status of these bonds subjects them to severe restrictions that would not apply if they were classified as governmental bonds.

Assessment

Recently, some efforts have been made to reclassify nonprofit bonds, including nonprofit hospital bonds, as governmental bonds. The proponents of such a change suggest that the public nature of services provided by nonprofit organizations merit such a reclassification. Opponents argue that the expanded access to subsidized loans coupled with the absence of sufficient government oversight may lead to greater misuse than if the facilities received direct federal spending. Questions have also been raised about whether nonprofit hospitals fulfill their charitable purpose and if they deserve continued access to tax-exempt bond finance.

Even if a case can be made for this federal subsidy for nonprofit organizations, it is important to recognize the potential costs. As one of many categories of tax-exempt private-activity bonds, bonds for nonprofit organizations increase the financing cost of bonds issued for other public capital. With a greater supply of public bonds, the interest rate on the bonds necessarily increases to lure investors. In addition, expanding the availability of tax-exempt bonds increases the assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Barker, Thomas R. "Re-Examining the 501(c)(3) Exemption of Hospitals as Charitable Organizations," *The Exempt Organization Tax Review*. July 1990, pp. 539-553.

Bernet, Patrick M. and Thomas E. Getzen. "Can a Violation of Investor Trust Lead to Financial Contagion in the Market for Tax-Exempt Hospital Bonds?," *International Journal of Health Care Finance and Economics*, vol. 8, no. 1 (March 2008), pp. 27-51.

Copeland, John and Gabriel Rudney. "Federal Tax Subsidies for Not-for-Profit Hospitals," *Tax Notes*. March 26, 1990, pp. 1559-1576.

Gentry, William M., and John R. Penrod. "The Tax Benefits of Not-For-Profit Hospitals," Cambridge, MA, *National Bureau of Economic Research*, 1998. Working Paper No. 6435.

Gershberg, Alec I., Michael Grossman, and Fred Goldman. "Health Care Capital Financing Agencies: the Intergovernmental Roles of Quasi-government Authorities and the Impact on the Cost of Capital," *Public Budgeting and Finance*, v. 20 (Spring 2000), pp. 1-23.

Gershberg, Alec Ian, Michael Grossman, and Fred Goldman. "Competition and the Cost of Capital Revisited: Special Authorities and

Underwriters in the Market for Tax-Exempt Hospital Bonds," *National Tax Journal.* June 2001, pp. 255-280.

Jantzen, Robert and Patricia R. Loubeau. "Managed Care and U.S. Hospitals' Capital Costs," *International Advances in Economic Research*, v. 9, no. 3. August 2003, pp. 206-217.

Lunder, Erika. *Tax-Exempt Section 501(c)(3) Hospitals: Community Benefit Standard and Schedule H*. Library of Congress, Congressional Research Service Report RL34605. July 2008.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 2008.

— . *Private Activity Bonds: An Analysis of State Use, 2001 to 2006*. Library of Congress, Congressional Research Service Report RL30638. April 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 2008.

Zimmerman, Dennis. "Nonprofit Organizations, Social Benefits, and Tax Policy." *National Tax Journal*. September 1991, pp. 341-349.

— . *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activities*. Washington, DC: The Urban Institute Press, 1991.

DEDUCTION FOR CHARITABLE CONTRIBUTIONS TO HEALTH ORGANIZATIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	3.9	0.3	4.2
2009	4.0	0.3	4.3
2010	4.3	0.3	4.6
20119	4.6	0.3	4.9
2012	5.0	0.3	5.3

Authorization

Section 170 and 642(c).

Description

Subject to certain limitations, charitable contributions may be deducted by individuals, corporations, and estates and trusts. The contributions must be made to specific types of organizations, including organizations whose purpose is to provide medical or hospital care, or medical education or research. To be eligible, organizations must be not-for-profit.

Individuals who itemize may deduct qualified contribution amounts of up to 50 percent of their adjusted gross income (AGI) and up to 30 percent for gifts of capital gain property. For contributions to nonoperating foundations and organizations, deductibility is limited to the lesser of 30 percent of the taxpayer's contribution base, or the excess of 50 percent of the contribution base for the tax year over the amount of contributions which qualified for the 50-percent deduction ceiling (including carryovers from previous years). Gifts of capital gain property to these organizations are limited to 20 percent of AGI.

The maximum amount deductible by a corporation is 10 percent of its adjusted taxable income. Adjusted taxable income is defined to mean taxable income with regard to the charitable contribution deduction, dividends-received deduction, any net operating loss carryback, and any capital loss carryback. Excess contributions may be carried forward for five years. Amounts carried forward are used on a first-in, first-out basis after the deduction for the current year's charitable gifts have been taken. Typically, a deduction is allowed only in the year in which the contribution occurs. However, an accrual-basis corporation is allowed to claim a deduction in the year preceding payment if its board of directors authorizes a charitable gift during the year and payment is scheduled by the 15th day of the third month of the next tax year.

If a contribution is made in the form of property, the deduction depends on the type of taxpayer (*i.e.*, individual, corporate, etc.), recipient, and purpose.

As a result of the enactment of the American Jobs Creation Act of 2004, P.L. 108-357, donors of noncash charitable contributions face increased reporting requirements. For charitable donations of property valued at $5,000 or more, donors must obtain a qualified appraisal of the donated property. For donated property valued in excess of $500,000, the appraisal must be attached to the donor's tax return. Deductions for donations of patents and other intellectual property are limited to the lesser of the taxpayer's basis in the donated property or the property's fair market value. Taxpayers can claim additional deductions in years following the donation based on the income the donated property provides to the donee. The 2004 act also mandated additional reporting requirements for charitable organizations receiving vehicle donations from individuals claiming a tax deduction for the contribution, if it is valued in excess of $500.

Taxpayers are required to obtain written substantiation from a donee organization for contributions which exceed $250. This substantiation must be received no later than the date the donor-taxpayer files the required income tax return. Donee organizations are obligated to furnish the written acknowledgment when requested with sufficient information to substantiate the taxpayer's deductible contribution.

The Pension Protection Act of 2006 (P.L. 109-280) included several provisions that temporarily expand charitable giving incentives. The provisions, effective after December 31, 2005 and before January 1, 2008, include enhancements to laws governing non-cash gifts and tax-free distributions from individual retirement plans for charitable purposes. The 2006 law also tightened rules governing charitable giving in certain areas, including gifts of taxidermy, contributions of clothing and household items, contributions of fractional interests in tangible personal property, and record-keeping and substantiation requirements for certain charitable contributions. Temporary charitable giving incentives were further extended by the

Economic Emergency Economic Stabilization Act of 2008 (P.L. 110-343) enacted in October 2008.

Impact

The deduction for charitable contributions reduces the net cost of contributing. In effect, the federal government provides the donor with a corresponding grant that increases in value with the donor's marginal tax bracket. Those individuals who use the standard deduction or who pay no taxes receive no benefit from the provision.

A limitation applies to the itemized deductions of high-income taxpayers. Under this provision, initially a phaseout applied which reduced itemized deductions by 3 percent of the amount by which a taxpayer's adjusted gross income (AGI) exceeds an inflation adjusted dollar amount ($166,800 in 2009). This phase out is, in turn being phased out, and in 2009 is reduced by two thirds. It is eliminated in 2010, but after that year the elimination of the phaseout expires, unless extended. The table below provides the distribution of all charitable contributions, not just those to health organizations.

Distribution by Income Class of the Tax Expenditure for Charitable Contributions, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	0.1
$20 to $30	0.3
$30 to $40	0.8
$40 to $50	1.6
$50 to $75	6.6
$75 to $100	8.0
$100 to $200	27.5
$200 and over	55.2

Rationale

This deduction was added by passage of the War Revenue Act of October 3, 1917. Senator Hollis, the sponsor, argued that high wartime tax rates would absorb the surplus funds of wealthy taxpayers, which were generally contributed to charitable organizations.

The provisions enacted in 2004 resulted from Internal Revenue Service and congressional concerns that taxpayers were claiming inflated charitable deductions, causing the loss of federal revenue. In the case of vehicle donations, concern was expressed about the inflation of deductions. GAO reports published in 2003 indicated that the value of benefit to charitable organizations from donated vehicles was significantly less than the value claimed as deductions by taxpayers. The 2006 enactments were, in part, a result of continued concerns from 2004.

Assessment

Supporters note that contributions finance desirable activities such as hospital care for the poor. Further, the Federal Government would be forced to step in to assume some of the activities currently provided by health care organizations if the deduction were eliminated; however, public spending might not be available to make up all of the difference. In addition, many believe that the best method of allocating general welfare resources is through a dual system of private philanthropic giving and governmental allocation.

Economists have generally held that the deductibility of charitable contributions provides an incentive effect which varies with the marginal tax rate of the giver. There are a number of studies which find significant behavioral responses, although a study by Randolph suggests that such measured responses may largely reflect transitory timing effects.

Types of contributions may vary substantially among income classes. Contributions to religious organizations are far more concentrated at the lower end of the income scale than are contributions to health organizations, the arts, and educational institutions, with contributions to other types of organizations falling between these levels. However, the *volume* of donations to religious organizations is greater than to all other organizations as a group. In 2005, the American Association of Fund-Raising Counsel Trust for Philanthropy, Inc. (AAFRC) estimated that contributions to religious institutions amounted to 45 percent of all contributions ($93.2 billion), while contributions to health care providers and associations amounted to less than 21 percent ($22.5 billion).

Using current dollars, AAFRC reported giving to health increased by 4.8 percent in 2000, declined in 2001 and 2002, rose by 8.2 percent in 2003, 5.1 percent in 2004, and 2.7 percent in 2005.

There has been a debate concerning the amount of charity care being provided by health care organizations with tax-exempt status. In the 109th Congress, hearings were held by both the Senate Committee on Finance and the House Committee on Ways and Means to examine the charitable status of nonprofit health care organizations. Those who support eliminating

charitable deductions note that deductible contributions are made partly with dollars which are public funds. They feel that helping out private charities may not be the optimal way to spend government money.

Opponents further claim that the present system allows wealthy taxpayers to indulge special interests and hobbies. To the extent that charitable giving is independent of tax considerations, federal revenues are lost without having provided any additional incentive for charitable gifts. It is generally argued that the charitable contributions deduction is difficult to administer and that taxpayers have difficulty complying with it because of complexity.

Selected Bibliography

Aprill, Ellen P. "Churches, Politics, and the Charitable Contribution Deduction," *Boston College Law Review*, v. 42 (July 2001), pp. 843-873.

Bennett, James T. and Thomas J. DiLorenzo. *Unhealthy Charities: Hazardous to Your Health and Wealth*, New York: Basic Books, c. 1994.

— . "What's Happening to Your Health Charity Donations?," *Consumers' Research*, v. 77 (December 1994), pp. 10-15.

— . "Voluntarism and Health Care," *Society*, v. 31 (July-August 1994), pp. 57-65.

Bloche, M. Gregg. "Health Policy Below the Waterline; Medical Care and the Charitable Exemption." *Minnesota Law Review*, v. 80 (December 1995), pp. 299-405.

Giving USA 2006, The Annual Report on Philanthropy for the Year 2005, The Center on Philanthropy At Indiana University. Indiana University-Purdue University, Indianapolis: 2006.

Boatsman, James R. and Sanjay Gupta, "Taxes and Corporate Charity: Empirical Evidence from Micro-Level Panel Data," *National Tax Journal*, Vol. 49, June 1996, pp. 193-213.

Buckles, Johnny Rex. "The Case for the Taxpaying Good Samaritan: Deducting Earmarked Transfers to Charity Under Federal Income Tax Law, Theory and Policy," *Fordham Law Review*, v. 70 (March 2002), pp. 1243-1339.

Burns, Jack. "Are Nonprofit Hospitals Really Charitable?: Taking the Question to the State and Local Level," *Journal of Corporation Law*, v.29, no. 3, pp. 665-681.

Clark, Robert Charles. "Does the Nonprofit Form Fit the Hospital Industry?" *Harvard Law Review,* v. 93 (May 1980), pp. 1419-1489.

Clotfelter, Charles T. "The Impact of Tax Reform on Charitable Giving: A 1989 Perspective." In *Do Taxes Matter? The Impact of the Tax Reform Act of 1986*, edited by Joel Slemrod, Cambridge, Mass.: MIT Press, 1990.

— . "The Impact of Fundamental Tax Reform on Non Profit Organizations." In *Economic Effects of Fundamental Tax Reform*, Eds. Henry J. Aaron and William G. Gale. Washington, DC: Brookings Institution, 1996.

Colombo, John D. "The Marketing of Philanthropy and the Charitable Contributions Deduction: Integrating Theories for the Deduction and Tax Exemption," *Wake Forest Law Review*, v. 36 (Fall 2001), pp. 657-703.

Crimm, Nina J. "An Explanation of the Federal Income Tax Exemption for Charitable Organizations: A Theory of Risk Compensation," *Florida Law Review*, v. 50 (July 1998), pp. 419-462.

Feenberg, Daniel. "Are Tax Price Models Really Identified: The Case of Charitable Giving," *National Tax Journal,* v. 40, no. 4 (December 1987), pp. 629-633.

Feldman, Naomi and James Hines, Jr. "Tax Credits and Charitable Contributions in Michigan," University of Michigan, Working Paper, October 2003.

Fisher, Linda A. "Donor-Advised Funds: The Alternative to Private Foundations," Cleveland Bar Journal, v. 72 (July/Aug. 2001), pp. 16-17.

Frank, Richard G., and David S. Salkever. "Nonprofit Organizations in the Health Sector." *Journal of Economic Perspectives*, v. 8 (Fall 1994), pp. 129-144.

Gentry, William M. and John R. Penrod. "The Tax Benefits of Not-For-Profit Hospitals," *National Bureau of Economic Research Working Paper Series*, w6435, February 1998, pp. 1-58.

Gravelle, Jane. *Economic Analysis of the Charitable Contribution Deduction for Nonitemizers*, Library of Congress, Congressional Research Service Report RL31108, April 29, 2005.

-. *Tax Issues Relating to Charitable Contributions and Organizations*, Library of Congress, Congressional Research Service report RL34608, August 5, 2008.

Green, Pamela and Robert McClelland. "Taxes and Charitable Giving," *National Tax Journal*, v. 54 (Sept. 2001), pp. 433-450.

Greenwald, Leslie, Jerry Cromwell, Walter Adamache, Shulamit Bernard, et al. "Specialty Versus Community Hospitals: Referrals, Quality, And Community Benefits,"*Health Affairs*; v. 25, Jan/Feb 2006, pp. 106-119.

Griffith, Gerald M. "What the IRS is Examining in CEP Audits of Health Care Organizations," *Journal of Taxation of Exempt Organizations*, v. 11 (March/April 2000), pp. 201-212.

Hall, Mark A. and John D. Colombo. 'The Charitable Status of Nonprofit Hospitals: Toward a Donative Theory of Tax Exemption," *Washington Law Review,* v. 66 (April 1991), pp. 307-411.

Horwitz, Jill R., "Making Profits And Providing Care: Comparing Nonprofit, For-Profit, And Government Hospitals," *Health Affairs*, v. 24, May/June 2005, pp.790-801.

— ,"Why We Need the Independent Sector: The Behavior, Law, and Ethics of Not-For-Profit Hospitals," *University of Michigan Public Law and Legal Theory Research Paper No. 35*, August 2003, pp. 1345-1411.

Hyman, David A. ""The Conundrum of Charitability: Reassessing Tax Exemption for Hospitals," *American Journal of Law and Medicine,* v. 16, (1990), pp. 327-380.

Jacobson, Rachel. "The Car Donation Program: Regulating Charities and For-Profits," *The Exempt Organization Tax Review*, v. 45, August 2004, pp. 213-229.

Jones, Darryll K. "When Charity Aids Tax Shelters," *Florida Tax Review*, v. 4 (2001), pp. 770-830.

Joulfaian, David and Mark Rider. "Errors-In-Variables and Estimated Income and Price Elasticities of Charitable Giving," *National Tax Journal*, v. 57 (March 2004), pp. 25-43.

Kahn, Jefferey H. "Personal Deductions: A Tax "Ideal" or Just Another "Deal"?," *Law Review of Michigan State University*, v. 2002 (Spring 2002), pp. 1-55.

Morrisey, Michael A., Gerald J. Wedig, and Mahmud Hassan. "Do Nonprofit Hospitals Pay Their Way?" *Health Affairs*, v. 15 (Winter 1996), pp. 132-144.

Omer, Thomas C. "Near Zero Taxable Income Reporting by Nonprofit Organizations," *Journal of American Taxation Association*, v. 25 (Fall 2003), pp. 19-34.

Owens, Bramer. "The Plight of the Not-for-Profit," *Journal of Healthcare Management*, v. 50, July/August 2005, pp. 237-251.

Randolph, William C. "Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions," *Journal of Political Economy*, v. 103 (August 1995), pp. 709-738.

—. "Charitable Deductions," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 1999, pp. 52-54.

Sanders, Susan M., "Measuring Charitable Contributions: Implications for the Nonprofit Hospital's Tax-exempt Status," *Hospital and Health Services Administration*, v. 38 (Fall 1993), pp. 401-418.

Smith, Bernard. "Charitable Contributions: A Tax Primer," *Cleveland Bar Journal*, v. 72 (November 2000), pp. 8-11.

Stokeld, Fred, "ETI Repeal Bill Would Tighten Rules on Vehicle, Patent Donations," *Tax Notes*, October 18, 2004, pp. 293-294.

Teitell, Conrad. "Tax Primer on Charitable Giving," *Trust & Estates*, v. 139, (June 2000), pp. 7-16.

Tiehen, Laura. "Tax Policy and Charitable Contributions of Money," National Tax Journal, v. 54 (December 2001), pp. 707-723.

Tobin, Philip T. "Donor Advised Funds: A Value-Added Tool for Financial Advisors," *Journal of Practical Estate Planning*, v. 3 (October/November 2001), pp. 26-35, 52.

U.S. Congress, Congressional Budget Office. Budget Options. See Rev-12, Limit Deductions for Charitable Giving to the Amount Exceeding 2 Percent of Adjusted Gross Income. Washington, DC: Government Printing Office (February 2005), p 281.

U.S. Congress, Government Accountability Office. *Vehicle Donations: Benefits to Charities and Donors, but Limited Program Oversight*, GAO Report GAO-04-73, Washington, DC: U.S. Government Printing Office (November 2003), pp. 1-44.

— . *Vehicle Donations: Taxpayer Considerations When Donating Vehicles to Charities,* GAO Report GAO-03-608T, Washington, DC: U.S. Government Printing Office (April 2003), pp. 1-15.

— . *Nonprofit Hospitals: Better Standards Needed for Tax Exemption.* Washington, DC: U.S. Government Printing Office (May 1990).

U.S. Congress, House Select Committee on Aging. *Hospital Charity Care and Tax Exempt Status: Resorting the Commitment and Fairness.* Washington, DC: U.S. Government Printing Office (June 1990).

—, Joint Committee on Taxation, *Present Law and Background Relating to the Tax-Exempt Status of Charitable Hospitals*, JCX-40-06, Washington, DC: U.S. Government Printing Office (September 2006), pp. 1-29.

EXCLUSION OF WORKERS' COMPENSATION BENEFITS (MEDICAL BENEFITS)

Estimated Revenue Loss*

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	8.1	-	8.1
2009	8.8	-	8.8
2010	9.5	-	9.5
2011	10.3	-	10.3
2012	11.2	-	11.2

Authorization

Section 104(a)(1).

Description

Payments for medical treatment of work-related injury or disease are provided as directed by various State and Federal laws governing workers' compensation. Employers finance workers' compensation benefits through commercial insurance or self-insurance arrangements (with no employee contribution) and their costs are deductible as a business expense. Employees are not taxed on the value of insurance contributions for workers' compensation medical benefits made on their behalf by employers, or on the medical benefits or reimbursements they actually receive. This is similar to the tax treatment of other employer-paid health insurance.

Impact

The exclusion from taxation of employer contributions for workers' compensation medical benefits provides a tax benefit to any worker covered by the workers' compensation program, not just those actually receiving medical benefits in a particular year.

Figures are not available on employer contributions specifically for workers' compensation medical benefits. As an approximation, however, in 2006, medical payments under workers' compensation programs totaled $26.5 billion. This represented 48 percent of total workers' compensation benefits. The rest consisted mainly of earnings-replacement cash benefits. (See entry on Exclusion of Workers' Compensation Benefits: Disability and Survivors Payments.)

Rationale

This exclusion was first codified in the Revenue Act of 1918. The committee reports accompanying the Act suggest that workers' compensation payments were not subject to taxation before the 1918 Act. No rationale for the exclusion is found in the legislative history. But it has been maintained that workers' compensation should not be taxed because it is in lieu of court-awarded damages for work-related injury or death that, before enactment of workers' compensation laws (beginning shortly before the 1918 Act), would have been payable under tort law for personal injury or sickness and not taxed. Workers' compensation serves as an exclusive remedy for injured workers and these workers are generally prohibited from seeking damages from their employers through the court system.

Assessment

Not taxing employer contributions to workers' compensation medical benefits subsidizes these benefits relative to taxable wages and other taxable benefits, for both the employee and employer. The exclusion allows employers to provide their employees with workers' compensation coverage at a lower cost than if they had to pay the employees additional wages sufficient to cover a tax liability on these medical benefits. In addition to the income tax benefits, workers' compensation insurance benefits are excluded from payroll taxation.

The tax subsidy reduces the employer's cost of compensating employees for accidents on the job and can be viewed as blunting financial incentives to maintain safe workplaces. Employers can reduce their workers' compensation costs if the extent of accidents is reduced. If the insurance premiums were taxable to employees, a reduction in employer premiums would also lower employees' income tax liabilities. Employees might then be willing to accept lower before-tax wages, thereby providing additional savings to the employer from a safer workplace.

Selected Bibliography

Burton, John F., Jr. "Workers' Compensation in the United States: A Primer," *Perspectives on Work,* v. 11. Summer 2007, pp. 23-25.

Hunt, H. Allan. *Adequacy of Earnings Replacement in Workers' Compensation Programs.* Kalamazoo MI: Upjohn Institute for Employment Research. 2004.

National Foundation for Unemployment Compensation and Workers' Compensation. "Fiscal Data for State Workers' Compensation Systems: 1986-95," *Research Bulletin* 97 WC-2. September 15, 1997, pp. 1-17.

Sengupta, Ishita, et al. *Workers' Compensation: Benefits, Coverage and Costs, 2006.* Washington, DC: National Academy of Social Insurance, 2008.

Thomason, Terry, Timothy Schmidle and John F. Burton. *Workers' Compensation, Benefits, Costs, and Safety under Alternative Insurance Arrangements*. Kalamazoo MI: Upjohn Institute for Employment Research. 2001.

U.S. Congress, House Committee on Ways and Means. *2004 Green Book: Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means*. Committee Print WMCP 108-6, 108th Congress, 2nd Session. Washington, DC: U.S. Government Printing Office, 2004, Section 15, pp. 137-148.

Welch, Edward M. *Employer's Guide to Workers' Compensation*, Washington, DC: The Bureau of National Affairs, Inc., 1994.

Wentz, Roy. "Appraisal of Individual Income Tax Exclusions," *Tax Revision Compendium.* U.S. Congress, House Committee on Ways and Means Committee Print. 1959, pp. 329-340.

Yorio, Edward. "The Taxation of Damages: Tax and Non-Tax Policy Considerations," *Cornell Law Review*, v. 62. April 1977, pp. 701-736.

TAX CREDIT FOR PURCHASE OF HEALTH INSURANCE BY CERTAIN DISPLACED PERSONS

Estimated Revenue Loss
[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	-	0.1
2009	0.1	-	0.1
2010	0.2	-	0.2
2011	0.2	-	0.2
2012	0.2	-	0.2

Authorization

Section 35.

Description

Eligible taxpayers are allowed a refundable tax credit for 65 percent of the premiums they pay for qualified health insurance for themselves and family members. The credit is commonly known as the health coverage tax credit (HCTC). Eligibility is limited to three groups: (1) individuals who are receiving a Trade Readjustment Assistance (TRA) allowance, or who would be except their State unemployment benefits are not yet exhausted; (2) individuals who are receiving an Alternative Trade Adjustment Assistance (ATAA) allowance for people age 50 and over; and (3) individuals who are receiving a pension paid in part by the Pension Benefit Guaranty Corporation (PBGC), or who received a lump-sum PBGC payment, and are age 55 and over. For TRA recipients, eligibility for the HCTC generally does not extend beyond two years, the maximum length of time most can receive TRA allowances or benefits, and could be less in some States.

The HCTC is not available to individuals who are covered under insurance for which an employer or former employer pays 50 percent or more of the cost, who are entitled to benefits under Medicare part A or an armed services health plan, or who are enrolled in Medicare part B, Medicaid, the State Children's Health Insurance Program (SCHIP), or the federal employees health plan. The Treasury Department makes advance payments of the credit to insurers for eligible taxpayers who choose this option.

The HCTC can be claimed only for ten types of insurance specified in the statute. Seven require State action to become effective, including coverage through a State high risk pool, coverage under a plan offered to State employees, and, in some limited circumstances, coverage under individual market insurance. As of October, 2008, 45 States and the District of Columbia made at least one of the seven types of coverage available; in the remaining 5 States, only three automatically qualified types not requiring State action were available, though not necessarily to all individuals eligible for the credit. For example, COBRA continuation coverage is available in all States, but it applies only if the taxpayer had employment-based insurance prior to losing his job and the employer continues to provide the insurance to the remaining employed workers.

Impact

The HCTC substantially reduces the after-tax cost of health insurance for eligible individuals and has enabled some to maintain or acquire coverage. However, given the cost of health insurance, which in 2008 averaged about $4,700 a year for employment-based comprehensive single coverage and $12,680 a year for employment-based comprehensive family coverage, a 65 percent credit has often not been sufficient to ensure coverage for workers who are unemployed for extended periods (in the case of TRA recipients) or who are early retirees (in the case of those receiving pensions paid by the PBGC). For these workers, paying the remaining 35 percent of the cost of the insurance can be difficult. Sometimes cash-constrained individuals reassess their need for insurance altogether, particularly if they are young and single. In addition to not being able to afford the remaining 35% of the cost, taxpayers have had difficulty learning about eligibility, finding qualifying insurance, and quickly arranging for advance payments.

According to the February 2008 estimates by Stan Dorn cited below, approximately 362,000 households a year meet the TAA, ATAA, or PBGC requirements, and of these between 181,000 and 232,000 qualify for the HCTC. In 2006, 26,000 households received the credit, between 12% and 15% of those eligible.

Rationale

The HCTC was authorized by the Trade Act of 2002 (P.L. 107-210). One impetus for the legislation was to assist workers who had lost their jobs, and consequently their health insurance coverage, due to economic dislocations in the wake of the September 11, 2001 terrorist attacks. Difficulties in reaching consensus on who should be included in this group contributed to the decision to restrict eligibility for the credit primarily to workers adversely affected by international trade (e.g., imported goods contributed importantly to their unemployment, or their companies shifted production to other countries). Extension to taxpayers receiving pensions paid by the PBGC occurred late in the legislative process.

By adopting the tax credit, Congress signaled its intention to help individuals maintain or acquire private market health insurance rather than expand public insurance programs like Medicaid or SCHIP. Both proponents and opponents initially saw the credit as a possible legislative precedent for a broader tax credit to reduce the number of uninsured, who by one measure now exceed 45 million. More recently, however, the possibility of a broader tax credit is being discussed in the context of comprehensive health care reform that would involve different and more challenging issues. Nonetheless, the rationale for the HCTC still may lie more in what it could indicate for future policy than in what it presently accomplishes.

Assessment

Tax credits for health insurance can be assessed by their effectiveness in continuing and expanding coverage, particularly for those who would otherwise be uninsured, as well as from the standpoint of equity. The HCTC is helping some unemployed and retired workers keep their insurance, at least temporarily; the impact may be greatest in the case of individuals who most need insurance (those with chronic medical conditions, for example) and who have the ability to pay the 35% of the cost not covered by the credit. For many eligible taxpayers, the effectiveness of the credit may depend on the advance payment arrangements; these might work well where there is a concentration of eligible taxpayers (where a plant is closed, for example) and if the certification process is simple and not perceived as part of the welfare system.

The HCTC has not reached many of the people it was intended to benefit, according to the estimates of Stan Dorn presented above. Considering the administrative cost of establishing and implementing the HCTC program (estimated by the GAO as $69 million through April, 2004, and $40 million a year thereafter), one might ask whether the HCTC benefits could not be provided in some other way.

The 65% HCTC rate is available to all eligible taxpayers with qualified insurance, regardless of income. From the standpoint of inclusiveness, this seems equitable. Using ability to pay as a measure, however, the one rate appears inequitable since it provides the same dollar subsidy to taxpayers regardless of income. An unemployed taxpayer with an employed spouse, for example, can receive the same credit amount as a taxpayer in a household where no one works. At the same time, the credit is refundable, so it is not limited to the taxpayer's regular tax liability.

The 65% rate approaches the proportion of insurance typically paid by employers; from this perspective, the HCTC continues what employers would be paying if the workers had not lost their jobs. However, employers can claim a tax deduction for their insurance expense and likely shift most of their after-tax cost back to the workers in the form of reduced wages and other benefits. By an economic measure, employer subsidies for health insurance probably are far less than 65%. But if a 65% tax credit provides a more generous subsidy than employers, it apparently is still not high enough to help many cash-constrained families purchase insurance.

The HCTC is limited to taxpayers in one of the three eligibility groups described above, who likely consider it appropriate to receive tax benefits for health insurance since most other taxpayers receive some as well. However, unemployed workers who do not receive TRA allowances or benefits (which generally are limited to the manufacturing sector) may question why they are denied the credit, as may early retirees whose pensions are not paid by the PBGC, or who receive no pension at all. At the end of the 110th Congress, funding for TRA and ATAA benefits was extended through March 6, 2009, though further extensions are possible.

The present tax credit is available to families that have individual market insurance only in limited circumstances. (If they do not purchase such insurance through a State qualified plan, they must have had it during the entire 30-day period prior to the separation from employment that qualified the worker for the TAA or PBGC assistance.) Some observers criticize these restrictions for limiting consumer choice; they argue that younger and healthier families could find less expensive individual coverage than what they must pay for group plans. Others see the restriction as helping to preserve larger insurance pools, which help keep rates down for older and less healthy individuals.

Some observers also criticize the requirements that State-operated health plans must meet in order to be considered qualified insurance for purpose of the credit, including guaranteed issue, no preexisting condition exclusions, nondiscriminatory premiums, and similar benefit packages. In their view, these requirements drive up the cost of insurance and lead some to forego coverage altogether. Other observers, however, maintain that these requirements are essential consumer protections.

Selected Bibliography

Dorn, Stan. *Health Coverage Tax Credits: A Small Program Offering Large Policy Lessons.* The Urban Institute (February, 2008).

——- *How Well Do Health Coverage Tax Credits Help Displaced Workers Obtain Health Care?* Statement before the House Committee on Education and Labor (March 27, 2007).

—— *Take-Up of Health Coverage Tax Credits: Examples of Success in a Program with Low Enrollment.* The Urban Institute (December, 2006).

Fernandez, Bernadette. *Health Coverage Tax Credit Authorized by the Trade Act of 2002.* Library of Congress, Congressional Research Service Report RL32620 (2008).

Kaiser Family Foundation. *Retired Steelworkers and Their Health Benefits: Results from a 2004 Survey.* (May, 2006).

Lyke, Bob and Julie M. Whittaker. *Tax Benefits for Health Insurance and Expenses: Overview of Current Law and Legislation.* Library of Congress, Congressional Research Service Report RL33505. (2008)

Pervez, Fouad and Stan Dorn. *Health Plan Options Under the Health Coverage Tax Credit Program.* The Urban Institute. (December, 2006).

Pollitz, Karen. Complexity and Cost of Health Insurance Tax Credits. *Journal of Insurance Regulation*. vol. 25, no. 4 (Summer 2007)

Topoleski, John J. *Trade Adjustment Assistance (TAA) for Workers: Current Issues and Legislation*. Library of Congress, Congressional Research Service Report RL34383. (2008)

——- *Trade Adjustment Assistance for Workers (TAA) and Alternative Trade Adjustment Assistance for Older Workers (ATAA)*. Library of Congress, Congressional Research Service Report RS22718. (2008).

U.S. Government Accountability Office. *Health Coverage Tax Credit: Simplified and More Timely Enrollment Process Could Increase Participation.* GAO-04-1029. (September, 2004).

—— *Trade Adjustment Assistance: Most Workers in Five Layoffs Received Services, but Better Outreach Needed on New Benefits.* GAO-06-43 (January, 2006)

U.S. Internal Revenue Service. Information about the Health Coverage Tax Credit is available at:
[http://www.irs.gov/individuals/content/0,,id=185826,00.html]

U.S. Treasury Inspector General for Tax Administration. *Financial Controls Over the Health Coverage Tax Credit Advance Payment Process Need to be Enhanced.* Reference no. 2006-10-085 (May, 2006).

DEDUCTION FOR HEALTH INSURANCE PREMIUMS AND LONG-TERM CARE INSURANCE PREMIUMS PAID BY THE SELF-EMPLOYED

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	4.4	-	4.4
2009	4.8	-	4.8
2010	5.2	-	5.2
2011	5.8	-	5.8
2012	6.3	-	6.3

Authorization

Section 162(l).

Description

Generally, a self-employed individual may deduct the entire amount he or she pays for health insurance (with some restrictions, which are discussed below), or long-term care insurance, for himself or herself and his or her immediate family. The deductible share of eligible insurance expenses rose from 25 percent in 1987 to 100 percent in 2003 and each year thereafter. For the purpose of this deduction only, self-employed individuals are defined as sole proprietors, working partners in a partnership, and employees of an S corporation who each own more than 2 percent of the corporation's stock. The deduction is taken above-the-line, which is to say that it may be used regardless of whether or not a self-employed individual itemizes on his or her tax return.

Use of the deduction for health insurance expenditures by the self-employed is subject to several limitations. First, the deduction cannot exceed a taxpayer's net earned income from the trade or business in which

the health insurance plan was established, less the deductions for 50 percent of the self-employment tax and any contributions to qualified pension plans. Second, the deduction is not available for any month when a self-employed individual is eligible to participate in a health plan sponsored by his or her employer or his or by her spouse's employer. Third, if a self-employed individual claims an itemized deduction for medical expenses under IRC section 213, those expenses must be reduced by any deduction for health insurance premiums claimed under section 162(1). Any health insurance premiums that cannot be deducted under section 162(1) may be included with these medical expenses, subject to the statutory threshold of 7.5 percent of adjusted gross income (AGI). Finally, the self-employed must include their deductible health insurance expenditures in the income base used to calculate their self-employment taxes.

Impact

In 2006, the most recent year for which data are available, claims for the health insurance deduction for the self-employed totaled 3.8 million (the same number as 2003), and the total amount claimed came to $20.3 billion (up from $16.4 billion in 2003). It is not known how many self-employed claimed the deduction for long-term care insurance premiums, or how much they spent for that purpose.

The deduction under section 162(l) reduces the after-tax cost of health insurance or long-term care insurance for self-employed individuals and their immediate families by an amount that depends on marginal tax rates. As a result, higher-income individuals reap greater benefits from the deduction than do lower-income individuals. Moreover, as there is no limit on the amount of health or long-term care insurance expenditures that can be deducted, the deduction has the potential to encourage self-employed individuals in higher tax brackets to purchase generous health insurance coverage.

The bond between the size of the subsidy and income is illustrated in the following table. It shows the percentage distribution by AGI of the total deduction for health insurance expenditures by the self-employed claimed for 2006, and the average amount claimed per tax return for each income class. On the whole, individuals with AGIs of less than $50,000 accounted for 32 percent of the total amount claimed. More telling was the distribution of the average amount claimed per tax return for each AGI class. The average claim increased with income to the extent that for individuals with an AGI of $200,000 and above, it was more than double the average claim for individuals with an AGI below $30,000. If the deductions were translated by the application of weighted marginal tax rates into tax savings by income class, the resulting tax expenditure values would be even more heavily distributed in favor of the higher-income groups.

Distribution of the Deduction for Medical Insurance Premiums by the Self-employed by Adjusted Gross Income Class in 2006

Adjusted Gross Income Class (in thousands of $)	Percentage Distribution of Deductions (%)	Average Amount of the Deduction Claimed per Tax Return ($)
Below $15	9	3,597
$15 to under $30	11	3,818
$30 to under $50	12	4,190
$50 to under $100	22	5,051
$100 to under $200	19	6,126
$200 and over	27	8,906
Total	**100**	**5,337**

Note: This is *not* a distribution of tax expenditure values. Derived from data taken from table 1.4-All Individual Returns: Sources of Income, Adjustments, and Tax Items, by Size of Adjusted Gross Income, Tax Year 2006, available through www.irs.gov.

Rationale

The health insurance deduction for the self-employed first entered the tax code as a temporary provision of the Tax Reform Act of 1986. Under the act, the deduction was equal to 25 percent of qualified health insurance expenditures and was set to expire on December 31, 1989. The Technical and Miscellaneous Revenue Act of 1988 made a few minor corrections to the provision.

A series of laws extended the deduction for brief periods during the early 1990s: the Omnibus Budget Reconciliation Act of 1989 extended the deduction for 9 months (through September 30, 1990) and made it available to subchapter S corporation shareholders; the Omnibus Budget Reconciliation Act of 1990 extended the deduction through December 31, 1991; the Tax Extension Act of 1991 extended the deduction through June

30, 1992; and the Omnibus Budget Reconciliation Act of 1993 extended it through December 31, 1993. Throughout this period, the deductible share of eligible health insurance expenditures remained at 25 percent.

Congress allowed the deduction to expire at the end of 1993 and took no action to extend it during 1994. A law enacted in April 1995, P.L. 104-7, reinstated the deduction, retroactive to January 1, 1994, and made it a permanent provision of the Internal Revenue Code. Under the act, the deductible share of eligible health insurance expenditures was to remain at 25 percent in 1994 and then rise to 30 percent in 1995 and beyond.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA, P.L. 104-191) increased the deductible share of health insurance expenditures by the self-employed from 30 percent in 1995 and 1996 to 40 percent in 1997 and gradually to 80 percent in 2006 and each year thereafter. HIPAA also allowed self-employed persons to include in the expenditures eligible for the deduction any payments they made for qualified long-term care insurance, beginning January 1, 1997. The act imposed dollar limits on the amount of long-term care premiums that could be deducted in a single tax year and indexed these limits for inflation. In 2008, these limits range from $310 for individuals age 40 and under to $3,850 for individuals over age 71 and over.

The Omnibus Consolidated and Emergency Supplemental Appropriations Act for FY1999 (P.L. 105-277) increased the deductible share to its present level: 70 percent of eligible expenditures in 2002 and 100 percent in 2003 and each year thereafter.

Assessment

In establishing the deduction for spending on health insurance and long-term care insurance by the self-employed, Congress seemed to have two motivations. One was to provide those individuals with a tax benefit comparable to the exclusion from the taxable income of any employer-provided health benefits received by employees. A second motive was to improve access to health care by the self-employed.

The deduction lowers the after-tax cost of health insurance purchased by the self-employed by a factor equal to a self-employed individual's marginal income tax rate. Individuals who purchase health insurance coverage in the non-group market but are not self-employed receive no such tax benefit. There is some evidence that the deduction has contributed to a significant increase in health insurance coverage among the self-employed and their immediate families. As one would expect, the gains appear to have been concentrated in higher-income households.

Proponents of allowing the self-employed to deduct 100 percent of health insurance expenditures cited vertical equity as the main justification for such tax treatment. In their view, it was only fair that the self-employed receive a tax subsidy for health insurance coverage comparable to what is available to employees who receive employer-provided health insurance.

While the section 162(l) deduction greatly narrowed the gap between the self-employed and employees, it does not go far enough to achieve true equality in the tax treatment of health insurance coverage for the two groups. Recipients of employer-provided health insurance (including shareholder-employees of S corporations who own more than 2 percent of stock) are allowed to exclude employer contributions from the wage base used to determine their Social Security and Medicare tax contributions. By contrast, the self-employed must include their spending on health insurance in the wage base used to calculate their self-employment taxes under the Self-Employment Contributions Act.

The deduction also raises some concerns about its efficiency effects. Critics of current federal tax subsidies for health insurance contend that a 100-percent deduction is likely to encourage higher-income self-employed individuals to purchase health insurance coverage that leads to wasteful or inefficient use of health care. To reduce the likelihood of such an outcome, some favor capping the deduction at an amount commensurate with a standardized health benefits package, adjusted for regional variations in health care costs.

There is also some evidence that health insurance may not be critical to the use of health care by the self-employed. A 2001 study by Harvey Rosen and Craig William Perry, using data on health care spending in 1996, examined the use of health care by the self-employed. It found no significant differences in utilization rates between employees and the self-employed in hospital admissions, hospital stays, dental checkups, and optometrist visits. The study also discovered that the self-employed had higher utilization rates for alternative care and chiropractor visits — even though they had a lower health insurance coverage rate than the employees. These findings call into question one of the primary rationales for expanding health insurance coverage through the use of tax subsidies: namely, that access to adequate health care hinges on having health insurance, at least with respect to the self-employed.

Selected Bibliography

Conly, Sonia. Self-Employment Health Insurance and Tax Incentives. *Proceedings of the Eighty-Eighth Annual Conference on Taxation, 1995*. Columbus, OH: *National Tax Association, 1996, pp. 138-44.*

Gruber, Jonathan and James Poterba. "Tax Incentives and the Decision to Purchase Health Insurance: Evidence from the Self-Employed," *The Quarterly Journal of Economics*, v. 109, issue 3. August 1994, pp. 701-33.

Guenther, Gary. *Federal Tax Treatment of Health Insurance Expenditures by the Self-Employed: Current Law and Issues for Congress.* Library of Congress, Congressional Research Service Report RL33311. Washington, DC: February 22, 2008.

Gurley-Calvez, Tami. *Health Insurance Deductibility and Entrepreneurial Survival*. Small Business Administration, Office of Advocacy. Washington, DC: April 2006.

Lyke, Bob and Julie M. Whittaker. *Tax Benefits for Health Insurance and Expenses: Overview of Current Law and Legislation*. Library of Congress, Congressional Research Service Report RL33505. Washington, DC: April 28, 2008.

Perry, William Craig and Harvey S. Rosen. *Insurance and the Utilization of Medical Services Among the Self-Employed*. Working Paper 8490. National Bureau of Economic Research. Cambridge, MA: September 2001.

U.S. Congress, House Committee on Ways and Means, Subcommittee on Health. *Health Insurance Premium Tax Deductions for the Self-Employed*. Hearing, Serial 104-36, 104th Cong., 1st Sess., January 27, 1995. Washington, U.S. Govt. Print. Off., 1996.

— , Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986, H.R. 3838, 99th Congress, P.L. 99-514*, Joint Committee Print JCS-10-87. Washington, DC: U.S. Government Printing Office, May 4, 1987, pp. 815-17.

— , *Present Law Tax Treatment of the Cost of Health Care*. Joint Committee Print JCX-81-08. Washington, DC: October 24, 2008.

Wellington, Alison J. "Health Insurance Coverage and Entrepreneurship," *Journal of Contemporary Economic Policy*, v. 19, no. 4, October 2001, pp. 465-478.

DEDUCTION FOR MEDICAL EXPENSES AND LONG-TERM CARE EXPENSES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	9.2	-	9.2
2009	10.6	-	10.6
2010	12.2	-	12.2
2011	16.4	-	16.4
2012	19.4	-	19.4

Authorization

Section 213.

Description

Most medical expenses that are paid for by an individual but not reimbursed by an employer or insurance company may be deducted from taxable income to the extent they exceed 7.5 percent of his or her adjusted gross income (AGI). In order to benefit from this deduction, individuals must itemize on their tax returns. If an individual receives reimbursements for medical expenses deducted in a previous tax year, the reimbursements must be included in his or her taxable income for the year when they were received. But any reimbursement received for medical expenses incurred in a previous year for which no deduction was used may be excluded from an individual's taxable income.

A complicated set of rules governs the expenses eligible for the deduction. These expenses include amounts paid by the taxpayer on behalf of himself or herself, his or her spouse, and eligible dependents for the following purposes:

(1) health insurance premiums, including a variable portion of premiums for long-term care insurance, employee payments for employer-sponsored health plans, Medicare Part B premiums, and other self-paid premiums;

(2) diagnosis, treatment, mitigation, or prevention of disease, or for the purpose of affecting any structure or function of the body, including dental care;

(3) prescription drugs and insulin (but not over-the-counter medicines);

(4) transportation primarily for and essential to medical care; and

(5) lodging away from home primarily for and essential to medical care, up to $50 per night for each individual.

In general, the cost of programs entered by an individual on his or her own initiative to improve general health or alleviate physical or mental discomfort unrelated to a specific disease or illness may not be deducted. But the cost of similar programs prescribed by a physician to treat a particular disease is deductible. The same distinction applies to procedures intended to improve an individual's appearance. For instance, the IRS does not consider the cost of whitening teeth discolored by aging to be a deductible medical expense, but the cost of breast reconstruction after a mastectomy or vision correction through laser surgery are deductible expenses.

Impact

For individual taxpayers who itemize, the deduction can ease the financial burden imposed by costly medical expenses. For the most part, the federal tax code regards these expenses as involuntary expenses that reduce a taxpayer's ability to pay taxes by absorbing a substantial part of income.

But the deduction is not limited to strictly involuntary expenses. It also covers some costs of preventive care, rest cures, and other discretionary expenses. A significant share of deductible medical expenses relates to procedures and care not covered by many insurance policies (such as orthodontia).

As with any deduction, the medical expense deduction yields the largest tax savings per dollar of expense for taxpayers in the highest income tax brackets. Yet, as the table below shows and relative to other itemized deductions, a larger percentage of the tax benefits from the medical expense deduction goes to taxpayers in the lower-to-middle income brackets. Taxpayers with AGIs below $50,000 accounted for 52 percent of the deduction in 2007. There are several reasons why such an outcome is not as unlikely or strange as it may seem. Lower-income taxpayers have relatively low rates of health insurance coverage, because they cannot afford health

insurance coverage or their employers do not offer it. As a result, many of these taxpayers are forced to pay out of pocket for the health care they and their immediate families receive. In addition, medical spending constitutes a larger fraction of household budgets among low-income taxpayers than it does among high-income taxpayers, making it easier for low-income taxpayers to exceed the 7.5-percent AGI threshold in a given tax year. Finally, low-income households are more likely to suffer large declines in their incomes than high-income households when serious medical problems cause working adults to lose time from work.

Distribution by Income Class of the Deduction for Medical Expenses in 2007

Income Class[a] (in thousands of $)	Percentage Distribution
Below $20	15
$20 to below $50	37
$50 to below $100	34
$100 to below $200	13
$200 and over	1

Source: Joint Committee on Taxation.

a: Income here is a combination of adjusted gross income, tax-exempt interest, employer contributions for health and life insurance plan, the employer share of FICA taxes, workers' compensation, non-taxable Social Security benefits, the insurance value of Medicare benefits, alternative minimum tax preference items, and the excluded income of U.S. citizens residing abroad.

Rationale

Since the early 1940s, numerous changes have been made in the rules governing the deduction of medical expenses. For the most part, these changes have focused on where to set the income threshold, whether to cap the deduction and at what amount, the maximum deductible amount for taxpayers who are 65 and over and disabled, whether to carve out separate income thresholds for spending on medicines and drugs and for health insurance expenditures, and the medical expenses that qualify for the deduction.

Taxpayers first were allowed to deduct health care expenses above a specific income threshold in 1942. The deduction was a provision of the Revenue Act of 1942. In adopting such a rule, Congress was trying to

encourage improved standards of public health and ease the burden of high tax rates during World War II. The original deduction covered medical expenses (including spending on health insurance) above 5 percent of AGI and was capped at $2,500 for a married couple filing jointly and $1,250 for a single filer.

Under the Revenue Act of 1948, the 5-percent income threshold remained intact, but the maximum deduction was changed so that it equaled the then personal exemption of $1,250 multiplied by the number of exemptions claimed. The act placed a cap on the deduction of $5,000 for joint returns and $2,500 for all other returns.

The Revenue Act of 1951 repealed the 5-percent floor for taxpayers and spouses who were age 65 and over. No change was made in the maximum deduction available to other taxpayers.

Congress passed legislation that substantially revised the Internal Revenue Code in 1954. One of its provisions reduced the AGI threshold to 3 percent and imposed a 1-percent floor for spending on drugs and medicines. In addition, the maximum deduction was increased to $2,500 per exemption, with a ceiling of $5,000 for an individual return and $10,000 for a joint or head-of-household return.

In 1959, the maximum deduction rose to $15,000 for taxpayers who were 65 and over and disabled, and to $30,000 if their spouses also met both criteria.

The threshold was removed on deductions for dependents age 65 and over the following year.

In 1962, the maximum deduction was increased to $5,000 per exemption, with a limit of $10,000 for individual returns, $20,000 for joint and head of household returns, and $40,000 for joint returns filed by taxpayers and their spouses who were 65 or over and disabled.

Congress eliminated the 1-percent floor on medicine and drug expenses for those age 65 or older (taxpayer, spouse, or dependent) in 1964. In the following year, a 3-percent floor for medical expenses and a 1-percent floor for drugs and medicines were reinstated for taxpayers and dependents aged 65 and over. At the same time, the limitations on maximum deductions were abolished, and a separate deduction not to exceed $150 was established for health insurance payments.

The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) made a number of significant changes in the deduction under section 213. First, it raised the floor from 3 percent to 5 percent of AGI. Second, it eliminated the separate deduction for health insurance payments and allowed taxpayers to combine them with other qualified medical expenses in computing the

section 213 deduction. Finally, TEFRA removed the separate 1-percent floor for drug costs, excluded non-prescription or over-the-counter drugs from the deduction, and merged the deduction for prescription drugs and insulin with the deduction for other medical expenses.

Under the Tax Reform Act of 1986 (TRA86), the income threshold for the medical expenses deduction increased from 5 percent of AGI to its present level of 7.5 percent.

The Omnibus Budget Reconciliation Act of 1990 disallowed deductions for the cost of cosmetic surgery, with certain exceptions. It also exempted the medical expense deduction from the overall limit on itemized deductions for high-income taxpayers.

Under the Health Insurance Portability and Accountability Act of 1996 (HIPAA, P.L. 104-191), spending on long-term care and long-term care insurance was granted the same tax treatment as spending on health insurance and medical expenses. This meant that as of January 1, 1997, taxpayers were allowed to include expenditures for long-term care and long-term care insurance in the medical expenses eligible for the deduction. The act also imposed annual dollar limits, indexed for inflation, on the of long-term care insurance payments a taxpayer may deduct, subject to the 7.5 percent of AGI threshold. The limits depend on the age of the insured person: in 2008, they range from $310 for individuals age 40 and under to $3,850 for individuals over age 70.

HIPAA also specified that periodic reimbursements received under a qualified long-term care insurance plan were considered payments for personal injuries and sickness and could be excluded from gross income, subject to a cap that was indexed for inflation. These payments could not be added to the expenses eligible for the section 213 deduction because they were considered reimbursement for health care received under a long-term care contract. Insurance payments above the cap that did not offset the actual costs incurred for long-term care services had to be included in taxable income.

Assessment

Changes in the tax laws during the 1980s substantially reduced the number of tax returns claiming the itemized deduction for medical and dental expenses. In 1980, 19.5 million returns, or 67 percent of itemized returns and 21 percent of all returns, claimed the deduction. But in 1983, the first full tax year reflecting the changes made by TEFRA, 9.7 million returns, representing 28 percent of itemized returns and 10 percent of all returns, claimed the deduction. The modifications made by TRA86 led to a further decline in the number of individuals claiming the deduction. In 1990, for instance, 5.1 million returns, or 16 percent of itemized returns and 4 percent

of all returns, claimed the deduction. Since then, however, the number of individuals claiming the deduction has been steadily rising. For example, 10.2 million returns claimed the deduction for 2006, or 21 percent of all itemized returns and about 7 percent of all returns.

The deduction is intended to assist taxpayers who have relatively high medical expenses paid out of pocket relative to their taxable income. Taxpayers are more likely to use the deduction if they can fit several large medical expenditures into a single tax year. Unlike the itemized deduction for casualty losses, a taxpayer cannot carry medical expenses that cannot be deducted in the current tax year over to previous or future tax years.

Some argue that the deduction serves the public interest by expanding health insurance coverage. In theory, it could have this effect, as it lowers the after-tax cost of such coverage. This reduction can be as large as 35% for someone in the highest tax bracket. Yet there appears to be a tenuous link, at best, between the deduction and health insurance coverage. So few taxpayers claim the deduction that it is unlikely to have much impact on the decision to purchase health insurance, especially among individuals whose only option for coverage is to buy health insurance in the non-group market, where premiums tend to be higher and gaps in coverage more numerous than in the group market. What is more, few among those who itemize and have health insurance coverage are likely to qualify for the deduction because insurance covers most of the medical care they use.

Current tax law violates the principles of vertical and horizontal equity in its treatment of health insurance expenditures. Taxpayers who receive health benefits from their employers receive a larger tax subsidy, at the margin, than taxpayers who purchase health insurance on their own or self-insure. Employer-paid health care is excluded from income and payroll taxes, whereas the cost of health insurance bought in the non-group market can be deducted from taxable income only to the extent it exceeds 7.5 percent of AGI. Lowering or abolishing the AGI threshold for the deduction would narrow but not eliminate the difference between the tax benefits for health insurance available to the two groups.

Selected Bibliography

Burman, Len, Jason Furman, Greg Leiserson, and Roberton Williams. *The President's Proposed Standard Deduction for Health Insurance: An Evaluation*. Tax Policy Center, Washington, DC: February 14, 2007.

Coder, Jeremiah. "Sex Change Operation Case Dwells on Medical Testimony and Emotion." *Tax Notes*, July 30, 2007, p. 348.

Goldsberry, Edward, Ashley Tenney and David Luke. "Deductibility of Tuition and Related Fees as Medical Expenses," *The Tax Adviser*, November 2002, pp. 701-702.

Guenther, Gary. *Tax Subsidies for Expanding Health Insurance Coverage: Selected Policy Issues for the 108th Congress*. Library of Congress, Congressional Research Service Report RL30762, Washington, DC: August 5, 2003.

Jones, Lawrence T. "Long-Term Care Insurance: Advanced Tax Issues," *Journal of Financial Service Professionals*, September 2004, pp. 51-59.

Kaplow, Louis. "The Income Tax as Insurance: The Casualty Loss and Medical Expense Loss Deductions and the Exclusion of Medical Insurance Premiums," *California Law Review*, v. 79, December 1991, pp. 1485-1510.

Lyke, Bob and Julie M. Whittaker. *Tax Benefits for Health Insurance and Expenses: Overview of Current Law and Legislation*. Library of Congress, Congressional Research Service Report RL33505, Washington, DC: April 28, 2008.

Pauly Mark V. "Taxation, Health Insurance, and Market Failure in the Medical Economy," *Journal of Economic Literature*, v. 24, no. 2. June 1986, pp. 629-75.

Rook, Lance W. "Listening to Zantac: The Role of Non-Prescription Drugs in Health Care Reform and the Federal Tax System," *Tennessee Law Review,* v. 62, Fall 1994, pp. 102-39.

Sheiner, Louise. "Health Expenditures, Tax Treatment," *The Encyclopedia of Taxation and Tax Policy*, ed. Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle. Washington: Urban Institute Press, 2005, pp. 175-176.

Steuerle, Gene. "Tax Policy Concerns: Long-Term Care Needs and the Government Response," *Tax Notes*, v. 83, May 10, 1999, pp. 917-918.

Talley, Louis Alan. *Medical Expense Deduction: History and Rationale for Past Changes*. Library of Congress, Congressional Research Service Report RL30833, Washington, DC: February 6, 2001.

U.S. Congress, Congressional Budget Office. *Tax Subsidies for Medical Care: Current Policies and Possible Alternatives*. Washington, DC: 1980.

— , House Committee on the Budget. *Tax Expenditures for Health Care*, Hearings, 96th Congress, 1st session, July 9-10, 1979.

— , House Committee on Ways and Means, Subcommittee on Health. *Long-Term Care Tax Provisions in the Contract with America*. Hearing, Serial 104-1, 104th Congress, 1st session. Washington, DC: U.S. Govt. Print. Off., January 20, 1995.

— , Joint Committee on Taxation. *Present Law Tax Treatment of the Cost of Health Care*. Joint Committee Print JCX-81-08. Washington, DC: October 24, 2008.

Vogel, Ronald. "The Tax Treatment of Health Insurance Premiums as a Cause of Overinsurance," *National Health Insurance: What Now, What Later, What Never?* ed. M. Pauly. Washington: American Enterprise Institute for Public Policy Research, 1980.

Wilensky, Gail R. "Government and the Financing of Health Care" *American Economic Review*, v. 72, no. 2. May 1982, pp. 202-07.

EXCLUSION OF EMPLOYER CONTRIBUTIONS FOR HEALTH CARE, HEALTH INSURANCE PREMIUMS, AND LONG-TERM CARE INSURANCE PREMIUMS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	116.8	-	116.8
2009	127.4	-	127.4
2010	136.9	-	136.9
2011	145.0	-	145.0
2012	154.2	-	154.2

Authorization

Sections 105, 106, and 125.

Description

Employees pay no income or payroll taxes on contributions by their employers to coverage under accident or health plans. This exclusion also applies to certain health benefits for employees who participate in so-called cafeteria plans established by their employers. Employees covered by these plans generally may exclude from taxable income their payments for employer-provided health insurance. In addition, many employers offer health benefits to employees through flexible spending accounts (FSAs). Under such an account, an employee chooses a benefit amount at the start of a calendar year and draws on the account over the course of the year to pay for medical expenses not covered by an employer's health plans. FSAs are funded through wage and salary reductions or through employer contributions, both of which are exempt from income and payroll taxes.

The exclusion for employer contributions to health and accident plans is available regardless of whether an employer self-insures or enters into

contracts with third-party insurers to provide group and individual health plans. Unlike some fringe benefits, there is no limit on the amount of employer contributions that may be excluded, with one notable exception. Generous reimbursements paid to highly compensated employees under self-insured medical plans that fail to satisfy specified non-discrimination requirements must be included in the employees' taxable income.

Impact

The tax exclusion for employer contributions to employee health plans benefits only those taxpayers who participate in employer-sponsored plans. Beneficiaries include current employees as well as retirees. In 2007, 59.3 percent of the U.S. population received health insurance coverage through employers, down from 59.7 percent in 2006, according to an estimate by the U.S. Census Bureau.

Although the tax exclusion benefits a majority of working Americans, it provides greater benefits to higher-income taxpayers than to lower-income ones. Highly paid employees tend to receive more generous employer-paid health insurance coverage than their lowly paid counterparts. And highly paid employees fall in higher tax brackets. The value of an exclusion depends in part on a taxpayer's marginal tax rate: for a given amount of employer-provided health insurance coverage, the larger the rate, the greater the tax benefit.

Non-discrimination rules apply to health and accident plans offered by self-insured employers. Under these rules, benefits paid to highly compensated employees must be included in their taxable incomes if a self-insured medical reimbursement plan discriminates in favor of these employees. However, the same rules do not apply to plans purchased from insurers that offer more generous benefits to highly compensated employees. In this case, those benefits are excluded from the taxable income of the highly paid employees.

While the tax code encourages the provision of health insurance through the workplace, not all workers receive health insurance coverage from their employers. Those at greatest risk of being uninsured include workers under age 25, workers in firms with fewer than 25 employees, part-time workers, workers earning relatively low wages, and workers in the construction, business and personal service, entertainment, and wholesale and retail trade industries.

The following table presents data for 2007 on health insurance coverage by income group for the entire non-institutionalized, non-elderly population of the United States. Income is expressed as a percentage of the Federal poverty income level for that year.

Health Insurance Coverage From Specified Sources, by Family Income Relative to the Federal Poverty Level, 2007 (Percent of U.S. Civilian, Non-institutionalized Population Under Age 65)

		Type of Insurance			
Income Relative to the Poverty Level[a]	Population (in millions)	Employment-based[b]	Public[c]	Other[d]	Uninsured
Less than 100%	33.7	16.9%	48.4%	5.7%	33.6%
100% to 149%	22.8	32.3%	34.8%	7.5%	32.4%
150% to 199%	21.3	49.0%	22.2%	9.0%	27.1%
200% and	184.1	78.9%	6.4%	10.6%	11.1%
Total	**261.9**	**64.3%**	**15.0%**	**9.8%**	**17.9.%**

People may have more than one source of health insurance; thus row percentages may total to more than 100.

[a] The weighted average poverty threshold for a family with two adults and two children in 2005 was $19,806. Excluded from the poverty analysis of the data on health insurance coverage were roughly 700,000 children who lived with families to which they were unrelated. Most of them were foster children. As a result, the total size of the under-65 population is 0.6 million larger than the size of the total population covered by the poverty analysis.

[b] Group health insurance through employer or union.

[c] Medicare, Medicaid, the State Children's Health Insurance Program, or other state programs for low-income individuals.

[d] Private nongroup health insurance, veterans coverage, or military health care.

Note: Based on Congressional Research Service analysis of data from the March 2008 Current Population Survey (CPS). Source: Peterson, Chris L and April Grady. *Health Insurance Coverage: Characteristics of the Insured and Uninsured Populations in 2007*. Library of Congress, Congressional Research Service Report 96-891, Washington, DC: updated September 3, 2008, Table 2, p. 3.

As the table clearly shows, the likelihood of having employer-provided health insurance increased substantially with household income. The percentage of those covered by employment-based health insurance (column 3) in 2007 climbed from 17 percent for people with family incomes below the poverty-level to 79 percent for people with family incomes two or more times that level.

At the same time, the likelihood of receiving public health insurance rose as family income fell. The percentage of those covered by public insurance (column 4) in 2007 dropped from 48 percent for those in the lowest income group to 6 percent for those in the highest income group. A similar pattern

is apparent among the uninsured: the percentage of uninsured declined from 34.0 percent for those in the lowest income group to 11.8 percent for those in the highest income group.

Rationale

The exclusion of compensation in the form of employer-provided accident or health plans originated with the Revenue Act of 1918. But the Internal Revenue Service (IRS) did not rule until 1943 that employer contributions to group health insurance policies for employees can be excluded from taxable income. This ruling did not address all outstanding issues surrounding the tax treatment of employer-provided health benefits. For instance, it did not apply to employer contributions to individual health insurance policies. The tax status of those contributions remained in doubt until the IRS ruled in 1953 that they should be taxed. This ruling had only a brief existence, as the enactment of IRC section 106 in 1954 reversed it. Henceforth, employer contributions to all accident and health plans were considered deductible expenses for employers and non-taxable compensation for employees. The legislative history of section 106 indicates that it was mainly intended to remove differences between the tax treatment of employer contributions to group and non-group or individual health insurance plans.

The Revenue Act of 1978 added the non-discrimination provisions of section 105(h). These provisions specified that the benefits paid to highly compensated employees under self-insured medical reimbursement plans were taxable if the plan discriminated in favor of these employees. The Tax Reform Act of 1986 repealed section 105(h) and replaced it with a new section 89 of the Internal Revenue Code, which extended non-discrimination rules to group health insurance plans. In 1989, P.L. 101-140 repealed section 89 and reinstated the pre-1986 Act rules under section 105(h).

Under the Health Insurance Portability and Accountability Act of 1996 (P.L. 104-191), employer contributions to the cost of qualified long-term care insurance may be excluded from employees' taxable income. But this exclusion does not apply to long-term care benefits received under a cafeteria plan or flexible spending account (FSA).

Assessment

The exclusion for employer-provided health insurance is thought to exert a strong influence on the health insurance coverage for a substantial share of the non-elderly working population. Because of the subsidy, employees face a significant incentive to prefer compensation in the form of health benefits rather than taxable wages. On average, $1 in added health benefits is worth only $0.70 in added wages.

Such a preference, however, has at least one notable drawback: it may lead employees to select more health insurance coverage than they need. Most health economists think the unlimited exclusion for employer-provided health benefits has distorted the markets for both health insurance and health care. Generous health plans encourage subscribers to use health services that are not cost-effective, putting upward pressure on health care costs.

The exclusion does have some social benefits. Owing to the pooling of risk that employment-based group health insurance provides, one can argue that the exclusion makes it possible for many employees to purchase health insurance plans that simply would not be available on the same terms or at the same cost in the individual market.

Workers and their dependents covered by employer-provided health plan receive a much greater tax subsidy than individuals who purchase health insurance in the individual market or who have no health insurance, pay out of pocket for their medical expenses, and claim the medical-expense itemized income tax deduction. The cost of employer-paid health care is completely excluded from the taxable income of those who receive such care. By contrast, relatively few taxpayers can take advantage of the medical expense deduction. To do so, they must itemize on their tax returns, and their out-of-pocket spending on medical care (including health insurance premiums) must exceed 7.5 percent of adjusted gross income. In addition to the tax exclusion, employer-paid health insurance is exempt from payroll taxation.

Proposals to limit the tax exclusion for employer-provided health benefits periodically receive serious consideration. Generally, their principal aim is to retain the main social benefit of the exclusion — expanded access to group health insurance — while curbing its main social cost — overly generous health insurance coverage. One way to achieve this goal would be to cap the exclusion at or somewhat below the average cost of group health insurance in major regions. A case in point is a proposal by the tax reform panel created by President George W. Bush in January 2005. In its final report, the panel recommended capping the exclusion at the average U.S. premiums for individual and family health insurance coverage.

Not all analysts agree with such an approach. Critics say that it would be difficult to determine in an equitable manner where to draw the line between reasonable and excessive health insurance coverage. They also contend that any limit on the exclusion would have to take into account the key factors determining health insurance premiums, including a firm's geographic location, size of its risk pool, and the risk profile of its employees. Limiting the subsidy for employer-provided health insurance would also carry a significant risk of some workers forgoing health insurance and some firms stopping the provision of health insurance to employees.

Selected Bibliography

Arnet, Grace-Marie, ed. *Empowering Health Care Consumers Through Tax Reform*. Ann Arbor, MI, University of Michigan Press, 1999.

Burman, Leonard E., Jason Furman, Greg Leiserson, and Roberton C. William, Jr. "The President's Proposed Standard Deduction for Health Insurance: Evaluation and Recommendations," *National Tax Journal*, vol. 60, no. 3. September 2007, pp. 433-454.

Burman, Leonard E., and Amelia Gruber. "First Do No Harm: Designing Tax Incentives for health Insurance," *National Tax Journal*, v. 54, no. 3. September 2001, pp. 473-493.

Burman, Leonard E., and Roberton Williams. Tax Caps on Employment-Based Health Insurance. *National Tax Journal*, v. 47, no. 3. September 1994, pp. 529-45.

Carasso, Adam. "Growth in the Exclusion of Employer Health Premiums." *Tax Notes*. June 27, 2005, p. 1697.

Cogan, John F., R. Glenn Hubard, and Daniel P. Kessler. *The Effect of Tax Preferences on Health Spending*, Working Paper 13767. National Bureau of Economic Research, Cambridge, MA: January 2008.

Feldstein, Martin, and Bernard Friedman. "Tax Subsidies, the Rational Demand for Insurance and the Health Care Crisis," *Journal of Public Economics*, v. 7. April 1977, pp. 155-78.

Fronstin, Paul. "Employment-Based Health Benefits: Trends in Access and Coverage." *Issue Brief*. no. 284. Employee Benefit Research Institute. Washington, DC: August 2005.

Gruber, Jonathan. *Taxes and Health Insurance*, Working Paper 8657. National Bureau of Economic Research, Cambridge, MA: December 2001.

Gruber, Jonathan, and James M. Poterba. "Tax Subsidies to Employer-Provided Health Insurance," in Martin Feldstein and James Poterba, eds., *Empirical Foundations of Household Taxation*. National Bureau of Economic Research. Chicago and London: Univ. of Chicago Press, 1996.

— . "Fundamental Tax Reform and Employer-Provided Health Insurance," in *Economic Effects of Fundamental Tax Reform*, eds. Henry H. Aaron and William G. Gale. Washington, DC: Brookings Institution Press, 1996, pp. 125-170.

Lyke, Bob and Julie M. Whittaker. *Tax Benefits for Health Insurance and Expenses: An Overview of Current Law and Legislation*. Library of Congress, Congressional Research Service Report RL33505, Washington, DC: April 28, 2008.

Marquis, Susan, and Joan Buchanan. "How Will Changes in Health Insurance Tax Policy and Employer Health Plan Contributions Affect Access to Health Care and Health Care Costs?" *Journal of the American Medical Association*, v. 271, no. 12. March 23/30, 1994, pp. 939-44.

Pauly, Mark V. "Taxation, Health Insurance, and Market Failure in the Medical Economy," *Journal of Economic Literature*, v. 24, no. 2. June 1986, pp. 629-75.

Pauly, Mark V., and John C. Goodman. "Using Tax Credits for Health Insurance and Medical Savings Accounts," in Henry J. Aaron, *The Problem That Won't Go Away*. Washington, DC: Brookings Institution, 1996.

President's Advisory Panel on Federal Tax Reform. *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System*. Washington, DC: November 2005.

Smart, Michael and Mark Stabile. *Tax Credits and the Use of Medical Care*, Working Paper 9855. Cambridge, MA: National Bureau of Economic Research, July 2003.

U.S. Congress, Congressional Budget Office. *Budget Options.* Washington, DC: February 2007, p. 279.

— . *The Tax Treatment of Employment-Based Health Insurance*. Washington, DC: March 1994.

— , House Committee on the Budget, Subcommittee on Oversight, Task Force on Tax Expenditures and Tax Policy. *Tax Expenditures for Health Care*, Hearings, 96th Congress, 1st session. July 9-10, 1979.

— , House Committee on Ways and Means. *1994 Green Book. Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means. Overview of Entitlement Programs*, Committee Print WMCP 103-27, 103rd Congress, 2nd session. Washington, DC: U.S. Government Printing Office, July 15, 1994, pp. 689-92, 943-50.

— , Joint Committee on Taxation. *Present Law Tax Treatment of the Cost of Health Care*, JCX-81-08. Washington, DC: October 24, 2008.

Wilensky, Gail R. "Government and the Financing of Health Care," *American Economic Review*, v. 72, no. 2. May 1982, pp. 202-07.

— , and Amy K. Taylor. "Tax Expenditures and Health Insurance: Limiting Employer-Paid Premiums," *Public Health Reports*, v. 97. September-October 1982, pp. 438-44.

EXCLUSION OF MEDICAL CARE AND CHAMPUS/TRICARE MEDICAL INSURANCE FOR MILITARY DEPENDENTS, RETIREES, RETIREE DEPENDENTS, AND VETERANS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.1	-	2.1
2009	2.2	-	2.2
2010	2.3	-	2.3
2011	2.5	-	2.5
2012	2.6	-	2.6

Authorization

Sections 112 and 134 and certain court decisions [see specifically *Jones v. United States*, 60 Ct. Cl. 552 (1925)].

Description

Active-duty military personnel are provided with a variety of benefits (or cash payments in lieu of such benefits) that are not subject to taxation. Among such benefits are medical and dental care. Dependents of active-duty personnel, retired military personnel and their dependents, veterans, survivors of deceased members, and reservists who have served on active duty since September 11, 2001 and join the Selected Reserve are also eligible for these health benefits — and thus can take advantage of the tax exclusion.

Military dependents and retirees are allowed to receive some of their medical care in military facilities and from military doctors, provided there is enough spare capacity. These individuals also have the option of being treated by civilian health-care providers working under contract with the Department of Defense (DOD). DOD currently relies on a program known

as TriCare to coordinate the medical care supplied by military and civilian providers. TriCare gives most beneficiaries three choices for receiving medical care: TriCare Prime, a DOD-managed health maintenance organization (HMO); TriCare Extra, a preferred-provider organization (PPO); or TriCare Standard (formerly known as CHAMPUS), a fee-for-service option. In addition, TriCare For Life is available for beneficiaries who are age 65 or over and thus are eligible for Medicare. Both TriCare Extra and TriCare Standard reimburse beneficiaries for a portion of their spending on civilian health care.

The FY2001 Defense Authorization Act included a provision allowing military retirees and their dependents who are eligible for Medicare A and participate in Medicare Part B to retain their TriCare coverage as a secondary payer to Medicare. To qualify for the coverage, an individual must have served at least 20 years in the military. Under the plan, TriCare pays for most of the cost of treatments not covered by Medicare.

Impact

As with the exclusion for employer-provided health insurance, the benefits from the tax exclusion for health benefits for military personnel and their dependents, retirees, and other eligible individuals depend on a recipient's tax bracket. The higher the tax bracket, the greater the tax savings. For example, an individual in the 10-percent tax bracket (the lowest Federal income tax bracket) avoids $10 in tax liability for every $100 of health benefits he or she may exclude; the tax savings rises to $35 for someone in the 35-percent tax bracket.

The larger tax saving for higher-income military personnel may be partly offset by the higher deductibles under the TriCare Extra plan and the higher co-payments for outpatient visits under the TriCare Prime plan required of dependents of higher-ranked personnel (E-5 and above). Retirees under age 65 and their dependents pay an enrollment fee for TriCare Prime and tend to pay higher deductibles and co-payments than the dependents of active-duty personnel. The FY2001 Defense Authorization Act eliminated these co-payments and deductibles for retirees and their dependents over age 64 who pay the Medicare Part B monthly premium.

Rationale

The tax exclusion for health care received by the dependents of active-duty military personnel, retirees and their dependents, and other eligible individuals has evolved over time. The main forces driving this evolution have been legal precedent, legislative action by Congress, a series of regulatory rulings by the Treasury Department, and long-standing administrative practices.

In 1925, the United States Court of Claims, in its ruling in *Jones v. United States,* 60 Ct. Cl. 552 (1925), drew a sharp distinction between the pay and allowances received by military personnel. The court ruled that housing and housing allowances for these individuals constituted reimbursements similar to other tax-exempt benefits received by employees in the executive and legislative branches.

Before this decision, the Treasury Department maintained that the rental value of living quarters, the value of subsistence allowances, and reimbursements should be included in the taxable income of military personnel. This view rested on an earlier federal statute, the Act of August 27, 1894 (which the courts subsequently deemed unconstitutional), which imposed a two-percent tax "on all salaries of officers, or payments to persons in the civil, military, naval, or other employment of the United States."

Under the Dependent Medical Care Act of 1956, the dependents of active-duty military personnel and retired military personnel and their dependents were allowed to receive medical care at military medical facilities on a "space-available" basis. Military personnel and their dependents gained access to civilian health care providers through the Military Medical Benefits Amendments Act of 1966, which created the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), the precursor of the Tricare system.

The Tax Reform Act of 1986 consolidated these rules into a new section 134 of the Internal Revenue Code. In taking this step, Congress wanted to make the tax treatment of military fringe benefits more transparent and consistent with the tax treatment of fringe benefits under the Deficit Reduction Act of 1984.

Even if there was no specific statutory exclusion for the health benefits received by military personnel and their dependents, a case for excluding them from taxation could be made on the basis of sections 105 and 106 of the Internal Revenue Code. These sections exclude from the taxable income of employees any employer-provided health benefits they receive.

Assessment

Some military fringe benefits resemble those offered by private employers, such as allowances for housing, subsistence, moving and storage expenses, higher living costs abroad, and uniforms. Others are similar to benefits provided by employers, such as medical and dental benefits, education assistance, group term life insurance, and disability and retirement benefits. While few would dispute that health benefits for active-duty personnel are critical to the military's mission and thus should not be taxed, health benefits for dependents of active-duty personnel and retirees and their dependents have more in common with an employer-provided fringe benefit.

Most of the economic issues raised by the tax treatment of military health benefits are similar to those associated with the tax treatment of civilian and employer-provided health benefits. A central concern is that a tax exclusion for health benefits encourages individuals to purchase excessive health insurance coverage and use inefficient amounts of health care. For health economists, health care is inefficient when its marginal cost exceeds its marginal benefit.

Nonetheless, some of the issues raised by military health benefits have no counterpart in the civilian sector. Direct care provided in military facilities may at times be difficult to value for tax purposes. At the same time, such care may be the only feasible option for dependents living with service members who have been assigned to regions where adequate civilian medical facilities are lacking.

Proposals to make the tax treatment of health care received by dependents of active-duty personnel less generous may have important implications for rates of enlistment in the military. Some argue that limiting the tax exclusion for health care received by dependents would need to be coupled with an increase in military pay in order to prevent large numbers of active-duty military personnel with dependents and incomes high enough to incur tax liabilities from returning to civilian life when their tours of duty expire.

Selected Bibliography

Best, Richard. *Military Medical Care Services: Questions and Answers*. Library of Congress, Congressional Research Service Report RL33537. Washington, DC: August 4, 2008.

Binkin, Martin. *The Military Pay Muddle*. Washington, DC: The Brookings Institution, April 1975.

Hamby, James E., Jr. "Tricare for Life Law Combines Medicare, Tricare Standard," *Air Force Times*, June 23, 2008, p. 43.

Hanson, Marshall. "Is TRICARE Standard or TRICARE Extra the Right Option?" *The Officer*, April 2004, p. 39.

Jansen, Don J. *Increases in Tricare Costs: Background and Options for Congress*. Library of Congress, Congressional Research Service Report RS22402. Washington, DC: October 23, 2008.

Owens, William L. "Exclusions From, and Adjustments to, Gross Income," *Air Force Law Review*, v. 19 (Spring 1977), pp. 90-99.

U.S. Congress, Congressional Budget Office. *The Tax Treatment of Employment Based Health Insurance*. Washington, DC: March 1994.

— , House. Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1986, H.R. 3838, 99th Congress, Public Law 99-514*. Washington, DC: U.S. Government Printing Office, 1987, pp. 828-830.

Joint Committee on Taxation. *Present Law Tax Treatment of the Cost of Health Care*. JCX-81-08. Washington, DC: October 24, 2008.

Winkenwerder, William Jr. "Tricare: Your Military Health Plan," *Soldiers Magazine*, February 1, 2004, p. S1.

TAX CREDIT FOR ORPHAN DRUG RESEARCH

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	0.3	0.3
2009	([1])	0.3	0.3
2010	([1])	0.3	0.3
2011	([1])	0.4	0.4
2012	([1])	0.4	0.4

([1]) Positive tax expenditure of less than $50 million.

Authorization

Sections 41(b), 45C, and 280C.

Description

Business taxpayers may claim a tax credit equal to 50 percent of certain clinical testing expenses they incur in developing drugs to treat rare diseases or conditions. To some, these drugs are known as orphan drugs. To qualify for the credit, the clinical testing expenses must be incurred or paid after an orphan drug has been approved for human testing by the Food and Drug Administration (FDA), but before the FDA has approved it for sale in the United States. Under section 526 of the Federal Food, Drug, and Cosmetic Act, a rare disease or condition is defined as one affecting fewer than 200,000 persons in the United States, or as one that may affect more than 200,000 persons, but for which there is no reasonable expectation of recovering research and development costs from U.S. sales alone.

The credit has been a component of the general business credit since 1997, subjecting the credit to its limitations and carryback and carryforward rules. As a result, orphan drug credits that cannot be used because they exceed

these limitations in a tax year may be carried back one year or forward up to 20 years.

Not all expenses incurred in connection with the conduct of clinical trials for orphan drugs qualify for the credit. Specifically, while the cost of supplies and salaries does qualify, the cost of depreciable property does not. Expenses that qualify for the orphan drug research credit also may not be used to claim the research tax credit under section 41. What is more, qualified testing expenses generally may be deducted in the year when they are incurred or paid as qualified research expenditures under section 174. But if a business taxpayer claims the orphan drug tax credit, it must reduce any deduction under that section by the amount of the credit.

Impact

The orphan drug tax credit reduces the cost of capital for investment in orphan drug development and could increase the cash flow of firms making such investments. Pharmaceutical firms capture the bulk of these benefits.

In the long run, the burden of the corporate income tax (and any benefits generated by reductions in that burden) probably extends beyond corporate stockholders to owners of capital in general.

To the extent that the credit has expanded the development of orphan drugs, it also benefits many persons suffering from rare diseases. According to FDA's Office of Orphan Products Development, more than 300 orphan drugs and biological products have received regulatory approval for marketing in the United States in the 25 years since the passage of the Orphan Drug Act of 1983; by contrast, only 10 such medicines were approved in the decade before 1983. An estimated 25 million Americans suffer from one of 7,000 rare diseases or conditions.

Rationale

The orphan drug tax credit first entered the federal tax code through the Orphan Drug Act of 1983. It was intended to provide a robust incentive for firms to invest in the development of drugs for diseases that were so rare there was little realistic prospect of recovering development costs without federal support. The act established two other subsidies for orphan drugs: federal grants for the testing of drugs, and a seven-year period of marketing exclusivity for orphan drugs approved by the FDA. Under the act, the only test for determining a drug's eligibility was that there is no reasonable expectation of recovering its cost of development from U.S. sales alone.

This test soon proved unworkable, as it required business taxpayers to provide detailed proof that a drug in development would end up being

unprofitable. So in 1984, Congress passed Public Law 98-551, which added another eligibility test: namely, that the potential domestic market for a drug not exceed 200,000 persons.

The initial tax credit was scheduled to expire at the end of 1987, but it was extended in succession by the Tax Reform Act of 1986, the Omnibus Budget Reconciliation Act of 1990, the Tax Extension Act of 1991, and the Omnibus Reconciliation Act of 1993. The credit expired at the end of 1994 but was reinstated for the period July 1, 1996 through May 31, 1997 by the Small Business Job Protection Act of 1996, which also allowed taxpayers with unused credits to carry them back up to three tax years or carry them forward up to 15 tax years. The credit became a permanent part of the Internal Revenue Code with the passage of the Taxpayer Relief Act of 1997.

To increase domestic investment in the development of diagnostics and treatments for patients with rare diseases and disorders, Congress passed the Rare Diseases Act of 2002. Among other things, the act established an Office of Rare Diseases at the National Institutes of Health and authorized increases in annual funding from FY2003 through FY2006.

Assessment

Supporters of the Orphan Drug Act cite the more than 300 orphan drugs that have been approved for marketing since the passage of the act and the more than 14 million Americans who have been treated with them as conclusive proof that the act's incentives are working as intended.

But not everyone shares that view. Some charge that more than a few pharmaceutical and biotechnology firms have taken advantage of the generous incentives for orphan drug development to develop and market drugs that have earned billions in sales revenue worldwide since their approval by the FDA. In 2003, for example, a total of nine such drugs each had worldwide sales in excess of $1 billion. These critics argue that many of the highly profitable orphan drugs that have entered the market since 1983 would have done so without government support. Supporters of the act dispute this claim, noting that it is difficult (if not impossible) to know in advance whether a drug intended to treat a very small population will eventually gain blockbuster status.

Others have found fault with the design of the Orphan Drug Act's incentives, without questioning the need for government support. For example, some argue that current regulations for orphan drugs allow firms to classify drugs with multiple uses as being useful for a narrow range of applications only, making it easier for them to gain orphan status.

In addition, some critics of the Orphan Drug Act question whether it is appropriate or desirable for federal tax policy to divert economic resources

from the development of drugs that may benefit a multitude of persons to the development of drugs that benefit relatively few, albeit with dramatic results in some cases.

Selected Bibliography

Asbury, Carolyn H. "The Orphan Drug Act: the First 7 Years," *Journal of the American Medical Association*, v. 265. February 20, 1991, pp. 893-897.

Biotechnology Industry Organization. *Clarification Needed in the Orphan Drug Tax Credit to Accelerate Research in Rare Diseases*. Washington: April 11, 2003.

Edgerly, Maureen. "Regulatory: Orphan Drug Regulation," *Research Practitioner*, v. 3 (Jan.-Feb. 2002), pp. 21-23.

Flynn, John J. "The Orphan Drug Act: An Unconstitutional Exercise of the Patent Power," *Utah Law Review*, no. 2 (1992), pp. 389-447.

Guenther, Gary. *Federal Taxation of the Pharmaceutical Industry: Effects on New Drug Development and Legislative Initiatives in the 109th Congress*. Congressional Research Service Report RL31511. Washington: June 1, 2005.

Haffner, Marlene E. "Orphan Products — Ten Years Later and Then Some," *Food and Drug Law Journal*, v. 49 (1994), pp. 593-601.

-. "Adopting Orphan Drugs: Two Dozen Years of Treating Rare Diseases." *New England Journal of Medicine*, vol. 354, no. 5, February 2, 2006, p. 445.

— , Josep Torrent-Farnell, and Paul D. Maher. "Does Orphan Drug Legislation Really Answer the Needs of Patients." *The Lancet*, vol. 371, no. 9629, June 14-2-, 2008, p. 2041.

Hamilton, Robert A. "'Orphans' Saving Lives," *FDA Consumer*, v. 24 (November 1990), pp. 7-10.

Henkel, John. "Orphan Products — New Hope for People with Rare Disorders," *FDA Consumer*, 2nd. Ed. (1995), pp. 46-49.

Kiely, Tom. "Spoiled by Success? Biotechnology Companies Abused the Intent of the Orphan Drug Act," *Technology Review*, v. 94, no. 3, (April 1991), pp. 17-18.

Levitt, Joseph A. and John V. Kelsey. "The Orphan Drug Regulations and Related Issues," *Food and Drug Law Journal*, v. 48 (1993), pp. 525-535.

Love, James and Michael Palmedo. *Costs of Human Use Clinical Trials: Surprising Evidence from the US Orphan Drug Act*. Consumer Project on Technology. November 28, 2001, available at http://www.cptech.org.

Shulman, Shelia R., Brigitta Bienz-Tadmor, Pheak Son Seo, Joseph A. DiMasi, and Louis Lasagna. "Implementation of the Orphan Drug Act: 1983-1991," *Food and Drug Law Journal*, v. 47 (1992), pp. 363-403.

Thamer, Mae, Niall Brennan, and Rafael Semansky. "A Cross-National Comparison of Orphan Drug Policies: Implications for the U.S. Orphan Drug Act," *Journal of Health Politics, Policy and Law*, v. 23 (April 1998), pp. 265-290.

Thomas, Cynthia A. "Re-Assessing the Orphan Drug Act," *Columbia Journal of Law and Social Problems*, v. 23, No. 3. 1990, pp. 413-440.

Treinish, Nathan J. "Developing Drugs for Tropical Diseases Rare in the United States: A Case Study on African Sleeping Sickness," *Food and Drug Law Journal*, v. 48 (1993), pp. 533-535.

U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration. *From Test Tube to Patient: New Drug Development in the United States*, Rockville, MD: 1995. 67 p.

Wechsler, Jill. "Smooth Sailing for Orphans." *Pharmaceutical Executive*, vol 28, no. 7, p. 32.

EXCLUSION OF UNTAXED MEDICARE BENEFITS: HOSPITAL INSURANCE (PART A)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	21.9	-	21.9
2009	23.7	-	23.7
2010	25.7	-	25.7
2011	30.1	-	30.1
2012	33.1	-	33.1

Authorization

Rev. Rul. 70-341, 1970-2 C.B. 31.

Description

The Medicare program has four main components: Parts A, B, C, and D. Part A offers hospital insurance (HI). It covers most of the cost of in-patient hospital care and as much as 100 days a year of skilled nursing facility care, home health care, and hospice care for individuals who are age 65 and over or disabled. In 2006, about 43 million aged and disabled persons were enrolled in Part A, and payments for Part A benefits totaled an estimated $189 billion.

Medicare Part A is financed primarily by a payroll tax levied on the earnings of current workers. The tax rate is 2.90 percent, and there is no ceiling on the earnings subject to the tax. Self-employed individuals pay the full rate, while employees and employers each pay 1.45 percent. The revenue from the tax is placed in a trust fund, from which payments are made to health care providers. Such a financing scheme allows individuals to contribute to the fund during their working years so they can receive Part A benefits during their retirement years.

The employer's share of the payroll tax is excluded from an employee's taxable income. Moreover, the expected lifetime value of Part A benefits under current law exceeds the amount of payroll tax contributions by current beneficiaries. These excess benefits are excluded from the taxable income of Medicare Part A beneficiaries.

Impact

All Medicare Part A beneficiaries are assumed to receive the same dollar value of in-kind insurance benefits per year. But in reality, there is substantial variation among individuals in the portion of those benefits covered by their payroll tax contributions — or the portion considered an untaxed benefit.

The portion of benefits received by a Medicare beneficiary considered untaxed depends on his or her history of taxable earnings and life expectancy at the time benefits are received. Untaxed benefits are likely to be larger for persons who became eligible in the earliest years of the Medicare program, for persons who had low taxable wages in their working years or who qualified as a spouse with little or no payroll contributions of their own, and for persons who have a relatively long life expectancy. Beyond these considerations, the tax expenditure arising from one dollar of untaxed insurance benefits also depends on a beneficiary's marginal income tax rate during retirement.

Rationale

The exclusion of Medicare Part A benefits from the federal income tax has never been established or recognized by statute. Although the Medicare program was created in 1965, the Internal Revenue Service waited until 1970 to rule (Rev. Rul. 70-341) that the benefits under Part A of Medicare may be excluded from gross income because they are in the nature of disbursements intended to achieve the social welfare objectives of the Federal Government. The ruling also stated that Medicare Part A benefits had the same legal status as monthly Social Security payments to an individual, in determining an individual's gross income under section 61 of the Internal Revenue Code. An earlier IRS ruling (Rev. Rul. 70-217, 1970-1 C.B. 13) allowed these payments to be excluded from gross income.

Assessment

In effect, the tax subsidy for Part A benefits lowers the after-tax cost to the elderly for those benefits. As a result, it has the potential to divert more

resources to the delivery of medical care through hospitals than otherwise might be the case.

Those who favor curtailing this subsidy, as a means of increasing federal revenue or reducing use of hospitals by the elderly, would find it difficult to do so in an equitable manner. There are at least two reasons for this difficulty. First, Medicare benefits receive the same tax treatment as most other health insurance benefits: they are untaxed. Second, taxing the value of the health care benefits actually received by an individual would have the largest impact on people who suffer health problems that are costly to treat; many of these individuals are elderly and living on relatively small incomes.

Under the Omnibus Budget Reconciliation Act of 1993 (OBRA93), a portion of the Social Security payments received by taxpayers whose so-called provisional income exceeded certain income thresholds was subject to taxation, and the revenue was deposited in the HI trust fund. A taxpayer's provisional income is his or her adjusted gross income, plus 50 percent of any Social Security benefit and the interest received from tax-exempt bonds. If a taxpayer's provisional income falls between income thresholds of $25,000 ($32,000 for a married couple filing jointly) and $34,000 ($44,000 for a married couple), then the portion of Social Security benefits that are taxed is the lesser of 50 percent of the benefits or 50 percent of provisional income above the first threshold. If a taxpayer's provisional income is greater than the second threshold, then the portion of Social Security benefits subject to taxation is the lesser of 85 percent of the benefits or 85 percent of provisional income above the second threshold, plus the smaller of $4,500 ($6,000 for married couples) or 50 percent of benefits. (See the entry on the exclusion of untaxed Social Security and railroad retirement benefits for more details). The same rules apply to railroad retirement tier 1 benefits.

For future retirees, the share of HI benefits they receive beyond their payroll tax contributions is likely to decrease gradually over time, as the contribution period will cover more of their work years. In addition, the absence of a cap on worker earnings subject to the Medicare HI payroll tax means that today's high-wage earners will contribute more during their working years and consequently receive a smaller (and possibly negative) subsidy once they begin to receive Medicare Part A benefits.

Before 1991, the taxable earnings base for Medicare Part A was the same as the earnings base for Social Security. But the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508) drove a wedge between the two bases by raising the annual cap on employee earnings subject to the Medicare HI tax to $125,000 in 1991 and indexing it for inflation in succeeding years. OBRA93 repealed the cap on wages and self-employment income subject to the Medicare HI tax, as of January 1, 1994.

In adopting changes in the HI payroll tax in 1990 and 1993, Congress chose a more progressive approach to financing the HI trust fund than the

chief alternative of raising HI payroll tax rates on the Social Security earnings base.

Selected Bibliography

Bryant, Jeffrey J. "Medicare HI Tax Becomes a Factor in Planning for Compensation and SE Income," *The Journal of Taxation*. January, 1995, pp. 32-34.

Christensen, Sandra. "The Subsidy Provided Under Medicare to Current Enrollees," *Journal of Health Politics, Policy, and Law*, v. 17, no. 2. Summer 1992, pp. 255-64.

Mulvey, Janemarie and Christine Scott. *Social Security: Calculation and History of Taxing Benefits*. Library of Congress, Congressional Research Service Report RL32552, Washington, DC: October 21, 2008.

O'Sullivan, Jennifer. *Medicare: A Primer.* Library of Congress, Congressional Research Service Report RL33712, Washington, DC: August 1, 2008.

Steuerle, Eugene C. "Taxing the Elderly on Their Medicare Benefits". *Tax Notes*, vol. 76, no. 3, July 21, 1997, pp. 427-428.

U.S. Congress, Congressional Budget Office. *Budget Options.* Washington, DC: February 2001, p. 412.

— , House Committee on Ways and Means. *2004 Green Book*. Committee Print, 108th Congress, 2nd Session. Washington, DC: U.S. Govt. Print. Off., March 2004. pp. 2-1 to 2-155.

Wilensky, Gail R. "Bite-Sized Chinks of Health Care Reform — Where Medicare Fits In," in Henry J. Aaron, *The Problem That Won't Go Away*. Washington, DC: The Brookings Institution, 1996.

EXCLUSION OF MEDICARE BENEFITS: SUPPLEMENTARY MEDICAL INSURANCE (PART B)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	14.6	-	14.6
2009	16.0	-	16.0
2010	17.7	-	17.7
2011	21.1	-	21.1
2012	23.5	-	23.5

Authorization

Rev. Rul. 70-341, 1970-2 C.B. 31.

Description

The Medicare program has four main components: Parts A, B, C and D. Part B of Medicare provides supplementary medical insurance (SMI). Among the services covered under Part B are certain physician services, outpatient hospital services, and durable medical equipment. In 2006, the most recent year for which final figures are available, nearly 40 million aged and disabled Americans were enrolled in SMI, and payments for SMI benefits totaled $165.9 billion.

Unlike Part A of Medicare, participation in SMI is voluntary. Enrollees must pay a minimum monthly premium that varies over time; in 2008, it is $96.40. Starting in 2007, Medicare enrollees with incomes above certain amounts pay higher Part B premiums. The program generally pays for 80 percent of Medicare's fee schedule or other approved amounts after a beneficiary satisfies an annual deductible, which is $135 in 2008. Premiums are permanently set to cover 25 percent of the program's estimated costs for

most recipients; the remaining 75 percent is funded out of general revenues.

Transfers from the general fund of the U.S. Treasury to pay for the cost of covered services are excluded from the taxable income of enrollees.

Impact

The tax expenditure associated with this exclusion depends on the marginal tax rates of enrollees. Unlike many other tax expenditures (where the amount of the subsidy can vary considerably among individual taxpayers), the general-fund premium subsidy for SMI is the same for most eligible individuals. All enrollees are assumed to receive the same dollar value of in-kind benefits, and all but the upper-income Medicare beneficiaries are charged the same monthly premium. As a result, most enrollees receive the same amount of the subsidy, which is measured as the difference between the value of insurance benefits and the premium. Yet the tax savings from the exclusion are greater for enrollees in higher tax brackets. Taxpayers who claim the itemized deduction for medical expenses under section 213 may include any Part B premiums they pay out of pocket or have deducted from their monthly Social Security benefits.

Rationale

The exclusion of Medicare benefits has never been established or recognized by statute. Rather, it emerged from two related regulatory rulings by the Internal Revenue Service (IRS).

In 1966, the IRS ruled (Rev. Rul. 66-216) that the premiums paid for coverage under Part B may be deducted as a qualified medical expense under section 213. The ruling did not address the tax treatment of the medical benefits received through Part B.

Four years later, the IRS did address this issue. In Rev. Rul. 70-341, the agency held that Medicare Part B benefits could be excluded from taxable income because they have the same status under the tax code as "amounts received through accident and health insurance for personal injuries or sickness." These amounts were (and still are) excluded from taxable income under section 104(a).

Rev. Rul. 70-341did not address the important question of whether the exclusion of Part B benefits applied to all such benefits, or only to the portion of benefits financed out of premiums. Nevertheless, the exclusion has applied to all Part B benefits (including the portion financed out of general revenues) since 1970.

This treatment is supported by the same rationale used by the IRS to justify the exclusion of Medicare Part A benefits from the gross income of beneficiaries. In Rev. Rul. 70-341, the agency noted that the benefits received by an individual under Part A are not "legally distinguishable from the monthly payments to an individual under title II of the Social Security Act." It also pointed out that the IRS had held in an earlier revenue ruling (Rev. Rul. 70-217) that monthly Social Security payments should be excluded from the gross income of recipients, as they are "made in furtherance of the social welfare objectives of the Federal government." So the IRS concluded that the "basic Medicare benefits received by (or on behalf of) an individual under part A title XVIII of the Social Security Act are not includible in the gross income of the individual for whom they are paid."

Assessment

Medicare benefits are similar to most other health insurance benefits in that they are exempt from taxation.

Initially, Part B premiums were set to cover 50 percent of projected SMI program costs. But between 1975 and 1983, that share gradually shrank to less than 25 percent. From 1984 through 1997, premiums were set to cover 25 percent of program costs under a succession of laws. A provision of the Balanced Budget Act of 1997 (P.L. 105-33) fixed the Part B monthly premium at 25 percent of projected program costs.

The tax subsidy for Part B reduces the after-tax cost of medical insurance for retirees. One consequence of this reduction is that enrollees are likely to consume excessive or inefficient amounts of health care. As the subsidy is not means-tested, upper-income Medicare beneficiaries gain more benefit from it than their lower-income counterparts.

Some have proposed adding the value of the subsidy to taxable income. There appear to be no significant administrative barriers to doing so. The value of the subsidy could easily be estimated, assigned to beneficiaries, and reported as income on their tax returns. A major drawback to such a proposal is that it would impose an added tax burden on older individuals of moderate means who have little flexibility in their budgets to absorb higher taxes.

Several proposals introduced in recent Congresses would effectively raise the Part B premiums for high-income enrollees — in some cases, the increase would cover 100 percent of average benefits per enrollee — by recapturing the subsidy through the individual income tax. Under the proposals, all revenues from taxing the subsidy would be added to the Medicare SMI Trust Fund. An individual would be permitted to deduct the recaptured subsidy to the same extent that he or she is allowed to deduct

other health insurance premiums paid out of pocket. Any reimbursement of the recaptured amount by a former employer would be excluded from a recipient's taxable income.

Selected Bibliography

Christensen, Sandra. "The Subsidy Provided Under Medicare to Current Enrollees," *Journal of Health Politics, Policy, and Law*, v. 17, no. 2. summer 1992, pp. 255-64.

Mulvey, Janemarie and Christine Scott. *Social Security: Calculation and History of Taxing Benefits*. Library of Congress, Congressional Research Service Report RL32552. Washington, DC: October 21, 2008.

O'Sullivan, Jennifer. *Medicare: A Primer.* Library of Congress, Congressional Research Service Report RL32582. Washington, DC: August 1, 2008.

Steuerle, Eugene. "Taxing the Elderly on Their Medicare Benefits." *Tax Notes*, vol. 76, no. 3, July 21, 1997, pp. 427-428.

U.S. Congress. Congressional Budget Office. *Budget Options.* Washington, DC: February 2001, p. 412.

— , House Committee on Ways and Means. *2004 Green Book*. Committee Print, 108th Congress, 2nd Session. Washington, DC: U.S. Govt. Print. Off., March 2004. pp. 2-1 to 2-155.

Wilensky, Gail R. "Bite-Sized Chinks of Health Care Reform — Where Medicare Fits In," in Henry J. Aaron, *The Problem That Won't Go Away*. Washington, DC: The Brookings Institution, 1996.

EXCLUSION OF MEDICARE BENEFITS: PRESCRIPTION DRUG BENEFIT (PART D)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	4.5	-	4.5
2009	5.3	-	5.3
2010	5.9	-	5.9
2011	6.9	-	6.9
2012	6.8	-	6.8

Authorization

Rev. Rul. 70-341, 1970-2 C.B. 31.

Description

The Medicare program has four main components: Parts A, B, C, and D. Part D provides a prescription drug benefit, which went into effect on January 1, 2006. The benefit is offered through stand-alone private prescription drug plans (PDPs) and Medicare Advantage (MA) prescription drug plans, such as health maintenance organizations, that provide all Medicare benefits, including coverage for drugs. Unlike other Medicare services, Medicare beneficiaries can obtain the drug benefit only by enrolling in one of those plans.

Part D plans offer either a defined standard benefit or an alternative benefit that is actuarially equivalent. They may also offer enhanced benefits. In 2008, the standard benefit includes a $275 deductible and 25-percent coinsurance, up to an initial coverage limit of $2,510 in total drug costs. This limit is followed by a coverage gap (also known as the "doughnut hole"), where enrollees pay for all of their drug expenses out of pocket until

their spending reaches $4,050, excluding the Part D premium. Thereafter, they pay either 5 percent of drug costs or a co-payment per prescription of $2.25 for generic or preferred drugs or $5.60 for other drugs. Only 12 percent of PDPs nationwide are offering the standard drug benefit in 2008. A majority of PDPs offer plans with no deductibles, and most plans require variable or tiered co-payments for covered drugs, rather than the 25-percent coinsurance. Part D plans vary in benefit design, covered drugs, the use of utilization management tools, and monthly premiums. All plans are required to provide beneficiaries with access to negotiated prices for covered drugs.

Unlike Part A of Medicare, participation in Part D is voluntary, with the exception of individuals who are eligible both for Medicare and Medicaid (so-called "dual eligibles") and certain other low-income Medicare beneficiaries who are automatically enrolled in a PDP if they do not select one on their own. Enrollees pay monthly premiums that vary across plans and regions, ranging in 2008 from a low of $9.80 for a standard-benefit PDP to a high of $107.50 for a PDP with an enhanced benefit. The average monthly premium in 2008 is $27.93. Substantial assistance with premiums and cost-sharing is available for beneficiaries with low incomes below $15,600 for individuals in 2008) and modest assets (below $11,990 for individuals in 2008).

As of January 2008, the Department of Health and Human Services (HHS) reported that 25.4 million Medicare beneficiaries were enrolled in Part D drug plans, an increase of 1.5 million from one year earlier. An estimated 9.4 million of these individuals are receiving low-income subsidies. In addition, an estimated 4.6 million beneficiaries, or 10 percent of the Medicare population, lacked comparable or "creditable" drug coverage from any source, including the health plans of former employers.

HHS has estimated that expenditures on Part D benefits will total $45 billion in 2008 and $55 billion in 2009. The amount depends primarily on the number of enrollees, their health status and drug use, the number of recipients of low-income subsidies, and the extent to which plans negotiate discounts and rebates with drug companies and control costs by promoting the use of generic drugs and mail-order pharmacies.

Funding for Part D comes from enrollee premiums, State contributions (through the so-called "clawback provision"), and general federal revenues. Monthly premiums are set to cover 25.5 percent of the cost of standard drug coverage. Medicare subsidizes the remaining 74.5 percent, based on bids submitted by plans for their expected benefit payments in the coming year. In 2008, plans are expected to receive average payments from Medicare of $770 for all enrollees and $1,909 for enrollees eligible for low-income subsidies. Plans also receive risk-adjusted payments for high-cost enrollees and reinsurance payments for a portion of their enrollees' costs above the catastrophic threshold, which is $4,050 in 2008.

In keeping with the tax treatment of benefits received by beneficiaries under Parts A and B of Medicare, transfers from the general fund of the U.S. Treasury and State governments to pay for the cost of the drug benefit not covered by premiums are excluded from the taxable income of enrollees.

Impact

In essence, the exclusion reduces the after-tax cost to enrollees of using covered drugs. As such, it promotes a central aim of Part D: expanded access to affordable prescription drugs among the elderly.

The tax expenditure linked to the exclusion depends on the marginal tax rates of enrollees and the subsidies they receive. Both factors can vary considerably. In this case, the subsidy is measured as the difference between the value of benefits an enrollee receives and the premium he or she pays. For the same subsidy amount, the tax savings from the exclusion are greater for enrollees in the highest tax bracket than for enrollees in the lowest tax bracket. Enrollees who claim the itemized deduction for medical expenses under section 213 may include their payments for Part D premiums.

Rationale

Part D was added to Medicare by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (P.L. 108-173), following years of debate in Congress over establishing such a benefit. It was intended to expand access to outpatient prescription drugs among the elderly, restrain their spending on drugs, and control program costs through heavy reliance on private competition and enrollee choice.

The Medicare Improvements for Patients and Providers Act of 2008 (P.L. 110-275), which became law on July 15, 2008, made a few modifications to the Part D program.

The exclusion of Medicare benefits has never been ratified by statute. Rather, it emerged from two related regulatory rulings by the Internal Revenue Service (IRS). In 1966, the IRS held in Rev. Rul. 66-216 that premiums paid for coverage under Part B could be deducted as a qualified medical expense under section 213. Four years later, the agency ruled (Rev. Rul. 70-341) that Part B benefits could be excluded from gross income because they had the same status under the tax code as "amounts received through accident and health insurance for personal injuries and sickness." Those amounts were (and still are) excluded from taxable income under section 104(a).

Assessment

Medicare benefits receive the same tax treatment as other health insurance benefits: they are exempt from taxation. In the case of the drug benefit under Part D, this treatment has the effect of reducing the after-tax cost to enrollees of the drugs they use. Making drugs more affordable for senior citizens is one of the objectives of the program.

There is some evidence that Part D already has made progress toward reaching some of its main objectives. As of January 2008, HHS reported that 57 percent of Medicare beneficiaries were enrolled in a Part D plan, and that 90 percent of beneficiaries had creditable drug coverage. The number of beneficiaries with drug coverage rose from 24 million to nearly 40 million between January 2006 and January 2008. According to estimates by Frank Lichtenberg and Shawn Sun, in 2006, Part D plans lowered the average cost to the elderly of using drugs by 18.4 percent, raised their total use of prescription drugs by 12.8 percent, and contributed to a 4.5 percent rise in aggregate consumption of drugs in the United States.

Still, the program has its share of critics. In their view, changes need to be made in the design of the benefit if it is to achieve all of its key objectives. They charge that the current program is too complex, has left too many beneficiaries without adequate drug coverage, is too costly, and does less than it should to lessen the financial risks associated with health care facing elderly individuals. Issues of particular concern to critics include the 2.6 million beneficiaries that had not enrolled in a Part D plan or had drug coverage through another source as of January 2008, the lack of a mandatory income or means test for setting premiums, the multitude of complex plans and choices within plans facing enrollees, and the inability of HHS to negotiate with drug manufacturers over prices (the so-called non-interference clause). Among the recommended changes are reducing or getting rid of the coverage gap, giving the federal government the power to negotiate lower prices with drug companies, establishing within Medicare a separate drug plan option in which beneficiaries could enroll in lieu of a private plan, and limiting the number of plans available in each region. Eliminating or limiting the exclusion for Part D benefits is evidently not among those changes.

Selected Bibliography

Frank, Richard G. and Joseph P. Newhouse. "Should Drug Prices Be negotiated Under Part D of Medicare? If so, How?" *Health Affairs*, vol. 27, no. 1, January/February 2008, pp. 33-43.

— . *Mending the Medicare Prescription Drug Benefit: Improving Consumer Choices and Restructuring Purchases*. Brookings Institution, Hamilton Project, Washington, DC: April 2007.

Henry J. Kaiser Foundation. *Medicare Now and in the Future*. Washington, DC: October 2008.

Lichtenberg, Frank R. and Shawn X. Sun. "The Impact of Medicare Part D on Prescription Drug Use by the Elderly." *Health Affairs*, vol. 26, no. 6, November/December 2007, pp. 1735-1744.

O'Sullivan, Jennifer. *Medicare Part D Prescription Drug Benefit: A Primer*. Library of Congress, Congressional Research Service Report RL34280, Washington, DC: August 20, 2008.

Steuerle, C. Eugene. "Taxing the Elderly on Their Medicare Benefits." *Tax Notes*, vol. 76, no. 3, July 21, 1997, pp. 427-428.

Medicare

EXCLUSION OF SUBSIDY PAYMENTS TO EMPLOYERS OFFERING CERTAIN PRESCRIPTION DRUG BENEFITS TO RETIREES ELIGIBLE FOR MEDICARE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-	1.1	1.1
2009	-	1.1	1.1
2010	-	1.1	1.1
2011	-	1.1	1.1
2012	-	1.1	1.1

Authorization

Section 139A and Section 1860D-22 of the Social Security Act (42 U.S.C. 1395w-132)

Description

The Medicare program has four components: Parts A , B, C, and D. Part D offers a voluntary outpatient prescription drug benefit that began on January 1, 2006. Every individual enrolled in Medicare Parts A or B, or who receives Medicare benefits through a private heath plan under Part C, is eligible to enroll in a qualified prescription drug plan.

Under Part D, beneficiaries have the choice of purchasing standard drug coverage or alternative coverage with actuarially equivalent benefits from any approved plan. In 2008, standard coverage has the following elements: a $275 deductible; 25-percent coinsurance for qualified drug expenses from $276 to $2,510; no coverage above this amount until an annual out-of-pocket threshold of $4,050 (or $5,726.25 in total spending) is reached; then unlimited coverage above that catastrophic limit, except for nominal cost-sharing. An enrollee's out-of-pocket spending on drugs that counts against

the out-of-pocket threshold does not include amounts paid or reimbursed by most third parties, including retiree health plans. In future years, the deductible, initial coverage limit, and the out-of-pocket threshold will be indexed to annual growth in per-capita spending by Medicare beneficiaries on drugs covered under Part D.

Coverage is obtained through private prescription drug plans or Medicare comprehensive plans that integrate Part A and B benefits under a revised Part C known as Medicare Advantage. Enrollees pay premiums intended to cover 26 percent of the overall cost of drug benefits under Part D: in 2008, the base monthly beneficiary premium is $27.93. Substantial subsidies are available to encourage extensive participation by low-income Medicare beneficiaries and prevent large numbers of public and private employers and unions that offer prescription drug benefits to retirees from dropping or sharply cutting such coverage.

Public and private employers and unions providing prescription drug benefits to retirees eligible for Medicare face four options under Part D, most of which are intended to encourage them to continue to offer similar or expanded benefits. First, they can elect to receive subsidy payments from Medicare if the drug benefits they offer to qualified retirees are actuarially equivalent to the standard drug coverage under Part D. Second, they can coordinate their drug benefits for retirees with the standard drug coverage under Part D by supplementing the Medicare coverage. Third, they can enter into a contract with an approved Medicare drug plan or a Medicare Advantage plan to provide drug benefits to retirees. Finally, they can stop providing drug benefits to retirees altogether, leaving those who are eligible for Medicare with the option of enrolling in a Part D plan.

Public and private employers and unions that opt for the subsidy payments must satisfy certain requirements in order to receive them. Under a ruling by the Centers for Medicaid and Medicare, so-called account-based health plans (e.g., flexible spending accounts, health savings accounts, and Archer medical savings accounts) do not offer drug benefits that qualify as creditable coverage. A qualified retiree is somebody who is eligible for coverage under part D but not enrolled in it, and who is covered under an employment-based group health plan. The Secretary of Health and Human Services (HHS) has the authority to audit the prescription drug benefits offered to Medicare-eligible retirees by employers or unions applying for or receiving subsidy payments to determine whether they meet the requirement that the benefits have an actuarial value that equals or exceeds that of standard coverage. In addition, to continue to receive the payments, an employer or union must provide HHS with annual proof that the prescription drug benefits it provides Medicare-eligible retirees are actuarially equivalent to the standard coverage under Part D.

In 2008, the subsidy payments are equal to 28 percent of a retiree's allowable gross prescription drug costs between $275 to $5,600. These costs

are defined as the combined amounts paid by a qualified retiree and his or her employer for prescription drugs covered under Part D, less rebates and discounts. In future years, the lower and upper limits are be indexed to annual growth in per-capita spending by Medicare beneficiaries on prescription drugs covered under Part D.

Employers who choose to receive subsidy payments are allowed to exclude them from their taxable income under both the regular income tax and the alternative minimum tax. In addition, the allowable drug costs used to determine the subsidy payments received by an employer may be included in the employer's deduction for contributions to health and accident plans for current and retired workers.

Impact

Generally, all sources of income are subject to taxation, except those specifically excluded by statute. Section 61 identifies the sources of income that are usually taxed, including employee compensation, capital gains, interest, and dividends. But some sources of income are granted a statutory exemption from taxation, including certain death benefits, interest on State and local bonds, amounts received under employer accident and health plans, certain other fringe benefits, and disaster relief payments. Sections 101 to 140 identify those sources and explain their tax treatment. The Medicare subsidy payments to employers under section 139A are one of these sources. Their exclusion from taxable income is considered a tax expenditure.

In combination, the subsidy and its preferential tax treatment significantly reduce the after-tax cost to employers of providing certain prescription drug benefits to retirees eligible for Medicare. The exclusion for the subsidy payments means they are equivalent to larger taxable payments tied to an employer's marginal tax rate. For example, for employers taxed at a marginal rate of 35 percent, a subsidy payment of $1,000 would be equivalent to a taxable payment of $1,538: $1,000/(1-.35) = $1,538.

Rationale

In passing the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA, P.L. 108-173), Congress added a voluntary outpatient prescription drug benefit to Medicare. Among other things, the act allows Medicare to make subsidy payments beginning in 2006 to employers that offer qualified prescription drug benefits to retirees eligible for Medicare. MMA also permits employers receiving such payments to exclude them from taxable income and to include the retiree drug costs used to determine their subsidy payments in their deductions for contributions to employee health and accident plans.

In August 2005, the Internal Revenue Service announced (Rev. Rul. 2005-60) that business taxpayers do not have to take into account any Medicare Part D employer subsidy payments they receive in computing their minimum cost requirements for the transfer of excess pension assets to retiree health benefit accounts under section 420.

The tax exclusion for the subsidy payments means that the effective subsidy rate over the range of qualified spending on drugs is 28 percent rather than some lower rate. Any lower subsidy rate would depend on an employer's marginal tax rate. For example, if an employer were taxed at a rate of 35 percent and subsidy payments were subject to taxation, then its effective subsidy rate would be 18.2 percent: .28 x (1-.35) = .182.

The subsidy payments and their preferential tax treatment are intended to prevent sizable numbers of employers that currently provide prescription drug benefits to Medicare-eligible retirees from dropping coverage and shifting the affected retirees into the government program. Supporters of the subsidy also maintain it will end up saving the federal government money, while giving retirees access to better prescription drug coverage than they might obtain through any of the Part D plans.

Assessment

The Medicare Part D prescription drug benefit went into effect as health benefits for retirees were shrinking. A 2006 survey of retiree health benefits by Hewitt Associates (HA) and the Kaiser Family Foundation (KFF) found that the percentage of firms with 200 or more employees offering health benefits to retirees fell from 66 percent in 1988 to 35 percent in 2006. In addition, retirees still receiving health benefits from former employers have been required to pay larger shares of the premiums for those benefits, as well as higher co-payments and deductibles. One of the main factors driving this shrinkage in coverage has been persistent double-digit increases in the cost to employers of providing those benefits. In the congressional debate over the creation of a Medicare outpatient drug benefit, some lawmakers expressed concern that the advent of the benefit would accelerate the erosion in retiree health benefits. To allay this concern, the law establishing the new Medicare benefit included an incentive for employers to continue to provide, or enhance, drug benefits for their retirees.

The incentive comes in the form of subsidy payments for employers who offer drug benefits to their retirees that are comparable to the standard drug coverage under Part D, and the exclusion of these payments from the taxable income of recipients. This tax treatment augments the value of the new Medicare subsidy for employers that pay taxes. For example, assume that an employer is taxed at a rate of 35 percent and receives part D subsidy payments totaling $1,000 in 2008. Because of the exclusion, its after-tax

cost of prescription drug benefits for retirees falls by $1,000; but if the payments were subject to taxation, this cost would fall by $650.

While the exclusion boosts the value of the subsidy payments to recipients, it also entails a revenue loss that adds to the total cost to the federal government of the Part D employer subsidies. The extent of the revenue loss in a particular year hinges on the number of employers getting the subsidy, their marginal tax rates, and the total amount of subsidy payments they receive. In 2006, 82 percent of eligible firms accepted the subsidy, and 79% of the firms that took the subsidy indicated in a survey conducted in late 2006 by HA/KFF that they would probably take the subsidy in 2007.

The number of employers electing the subsidy payments in the future has important implications for the welfare of retirees eligible for Medicare, the financial health of larger employers, and the condition of the federal budget.

There is evidence that the typical drug benefit available to retirees through employer health plans is more generous than the standard drug benefit available under Part D. Therefore, a substantial decrease in the number of employers claiming the subsidy in the next few years could have an adverse effect on the welfare of their retirees. Retirees losing coverage under employer health plans who enroll in a Part D prescription drug plan could end up with less generous benefits.

Large employers are much more likely than small or medium employers to provide health benefits to retirees. Thus it comes as no surprise that many large employers have viewed the Part D benefit as an unprecedented opportunity to cut their spending on retiree health benefits, or to free themselves from the responsibility of providing such benefits. According to a variety of surveys, around three-quarters of firms that were eligible for the Part D subsidy payments at the outset of the program opted to receive the payments in 2006. The remaining firms chose to supplement the Medicare drug benefit through their own health plans, become a Part D drug plan sponsor and shift all their retirees into the plan, or discontinue coverage of prescription drugs for their retirees altogether.

Some analysts expect the share of employers taking the subsidy will decline in the next few years. They argue that as employers become more familiar with the options available to them under Part D, they may discern financial or administrative advantages in following a course of action other than claiming the subsidy payments. A survey of 163 employers conducted by Watson Wyatt Worldwide in June 2006 found that 29% of them expect to claim the payments in the future. Many of them expressed a strong interest in giving their retirees incentives to enroll in Medicare Advantage plans. In addition, according to a study released by the Society of Actuaries in December 2005, the average employer could more than double its expected cost savings from 2006 to 2021 by dropping its current drug benefit

for retirees and paying the premium for a Part D drug plan to cover the same persons, rather than retaining its current drug benefit for retirees and taking the subsidy payments.

A decline over time in the number of employers receiving the subsidy payments could lead to substantial increases in the cost to the federal government of the Part D drug benefit. The Congressional Budget Office estimated that the net federal subsidy for drug benefits under part D was $1,211 per enrollee in 2006 for beneficiaries with no access to employer health plans, but $766 per enrollee for beneficiaries who received qualified drug benefits through employers that chose to receive the subsidy.

Selected Bibliography

Hewitt Associates and the Kaiser Family Foundation. *Prospects for Retiree Health Benefits as Medicare Prescription Drug Coverage Begins*. Washington, DC: December 2005.

— , *How Does the Benefit Value of Medicare Compare to the Benefit Value of Typical Large Employer Plans?* Washington, DC: September 2008.

Jareb, Cara M. And Randall K. Abbott. "Beyond the Subsidy: Medicare Part D Employer Options." *Benefits Quarterly*, vol. 22, no. 3, Third Quarter 2006.

Marchel, Richard and Kevin Dolsky. *Estimated Impact of Medicare Part D On Retiree Prescription Drug Costs*. Actuarial & Health Care Solutions, LLC, Mequon, WI: December 6, 2005.

Neuman, Patricia. *The State of Retiree Health Benefits: Historical Trends and Future Uncertainties*. Prepared statement for a hearing of Senate Special Committee on Aging held on May 17, 2004. Available at www.kff.org.

O'Sullivan, Jennifer. *Medicare Part D Prescription Drug Benefit: A Primer*. Library of Congress, Congressional Research Service Report RL34280. Washington, DC: August 20, 2008.

Shea, Dennis G., Bruce C. Stuart, and Becky Briesacher. "Participation and Crowd-Out in a Medicare Drug Benefit: Simulation Estimates," *Health Care Financing Review*, no. 2, v. 25, December 22, 2003.

U.S. Congress, Congressional Budget Office. *Issues in Designing a Prescription Drug Benefit for Medicare*. Washington, DC: October 2002.

— , *A Detailed Description of CBO's Cost Estimate for the Medicare Prescription Drug Benefit*. Washington, DC: July 2004.

U.S. Congress, Government Accountability Office. *Retiree Health Benefits: Options for Employment-Based Prescription Drug Benefits under the Medicare Modernization Act*. GAO-05-205, Washington, DC: February 2005.

— , *Retiree Health Benefits: Majority of Sponsors Continued to Offer Prescription Drug Coverage and Chose the Retiree Drug Subsidy*. GAO-07-752, Washington, DC: May 2007.

U.S. Congress, Senate Committee on Finance, *Implementing the Medicare Prescription Drug Benefit and Medicare Advantage Program: Perspectives on the Proposed Rules*, Hearing, 108th Congress, 2nd session, September 14, 2004. Available at www.finance.senate.gov.

U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. *The Retiree Drug Subsidy.* Available at: www.cms.hhs.gov/EmployerRetireeSubsid/01_Overview.asp.

Wojcik, Joanne. "Gaps in Data Slow Retiree Subsidies." *Business Insurance*, vol. 42, no. 4, January 28, 2008, pp. 1-2.

Yamamoto, Dale H. "What Comes After the Retiree Drug Subsidy?" *Benefits Quarterly*, vol. 22, no. 3, Third Quarter 2006, p. 13.

EXCLUSION OF DISASTER MITIGATION PAYMENTS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	([1])	([1])
2009	([1])	([1])	([1])
2010	([1])	([1])	([1])
2011	([1])	([1])	([1])
2012	([1])	([1])	([1])

Authorization

Section 139.

Description

Payments made for disaster mitigation (that is, payments made to mitigate damages for future hazards) under the Robert T. Stafford Disaster Relief and Emergency Insurance Act or the National Flood Insurance Act are excluded from income. Gain from the sale of property is not eligible, but sale under a disaster mitigation program is treated as an involuntary conversion, with deferral of gain pending replacement. The basis of any property is not increased as a result of improvements due to disaster mitigation payments.

Impact

Disaster mitigation grants cover a variety of mitigation expenditures such as securing items (e.g. wall- mounting appliances) to reduce potential damage from earthquakes, putting houses on stilts to reduce flood damage, tie-downs for mobile homes to protect against hurricanes and other windstorms, creating safe rooms, and securing roofs and windows from wind damage. The tax exclusion from mitigation payments increases the value

of these payments. The tax exemption is most beneficial for higher income individuals who have higher marginal tax rates. However, even individuals with relatively low incomes could be subject to tax since the mitigation payments can be large when used for major construction projects (such as putting houses in flood plains on stilts). These individuals might not have enough income to pay taxes on these grants and taxation might cause them not to participate in the program.

To the extent the payments increase the value of the property, they could be taxed as capital gains in the future, although most individuals do not pay capital gains tax on owner-occupied housing, and the capital gains tax rate is reduced for individuals.

Rationale

This provision was added by P. L. 109-7, Tax Treatment of Certain Disaster Mitigation Payments. The mitigation program had been in effect for about 15 years, but did not specify that these amounts would be taxable. In general, recipients had not paid tax on these grants. In June 2004, the IRS ruled that these payments, without a specific exemption in the law, were taxable income, and indicated the possibility of retroactive treatment of their ruling. The tax legislation was in response to that ruling and reflected the general view that individuals and businesses should not be discouraged from mitigation activities due to tax treatment on these payments.

Assessment

Disaster mitigation studies have suggested that the return on disaster mitigation expenditures is quite large on average ($3 or $4 dollars of benefit for each dollar spent), and since the programs are grants controlled by the government, these expenditures should continue to be cost effective. Some of these expenditures might have been undertaken in any case, without the grant, or with the grant but without tax exemption. While there appears to be some anecdotal evidence that the expectation of being taxed would significantly reduce the participation rate, there are apparently no statistical studies on this issue.

An argument can be made that individuals should be responsible for undertaking their own measures to reduce disaster costs since those expenditures would benefit them. At the same time, the government is heavily involved in disaster relief, and by providing programs such as subsidized flood insurance and direct disaster aid, may make the returns to individual investors smaller than they are to society as a whole. Disaster mitigation expenditures for individuals and businesses can also have benefits that spill over to the community at large, and an individual would not take these benefits into account when making an investment decision.

Selected Bibliography

Harrington, Jeff, "IRS to tax Hurricane Grants," *St. Petersburg Times*, Oct. 27, 2004:
[http://www.sptimes.com/2004/10/27/Business/IRS_to_tax_federal_hu.shtml].

McCarthy, Francis X., FEMA *Disaster Housing and Hurricane Katrina: Overview and Analysis*, Congressional Research Service Report RL34087, Washington, D.C. , 2008.

McCarthy, Francis X., *FEMA's Pre-Disaster Mitigation Program: Overview and Issues*, Congressional Research Service report RL34537, Washington, D.C. 2008.

U.S. Congress, Joint Committee on Taxation. General Explanation of Tax Legislation Enacted in the 109th Congress, Washington, D.C. U.S. Government Printing Office, January 17, 2007, pp. 6-7.

U.S. Congressional Budget Office, *Potential Cost Savings from the Pre-Disaster Mitigation Program*, Washington, D.C., September 2007.

EXCLUSION OF WORKERS' COMPENSATION BENEFITS (DISABILITY AND SURVIVORS PAYMENTS)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.7	-	2.7
2009	2.7	-	2.7
2010	2.7	-	2.7
2011	3.0	-	3.0
2012	3.1	-	3.1

Authorization

Section 104(a)(1).

Description

Workers' compensation benefits to employees in cases of work-related injury, and to survivors in cases of work-related death, are not taxable. Employers finance benefits through insurance or self-insurance arrangements (with no employee contribution), and their costs are deductible as a business expense.

Benefits are provided as directed by various State and Federal laws and consist of cash earnings-replacement payments, payment of injury-related medical costs, special payments for physical impairment (regardless of lost earnings), and coverage of certain injury or death-related expenses (e.g., burial costs). Employees and survivors receive compensation if the injury or death is work-related. Benefits are paid regardless of the party (employer, employee or third party) at fault, and workers' compensation is treated as the exclusive remedy for work-related injury or death.

Cash earnings replacement payments typically are set at two-thirds of lost pre-tax earning capacity, up to legislated maximum amounts. They are provided for both total and partial disability, generally last for the term of the disability, may extend beyond normal retirement age, and are paid as periodic (e.g., monthly) payments or lump-sum settlements.

Impact

Generally, any amounts received for personal injury or sickness through an employer-paid accident or health plan must be reported as income for tax purposes. This includes disability payments and disability pensions, as well as sick leave payments. In contrast, an exception is made for the monthly cash payments paid under State workers' compensation programs, which are excluded from income taxation.

Workers' compensation benefits in 2006 totaled $54.7 billion, approximately 52 percent of which consisted of cash payments to injured employees and survivors replacing lost earnings, and 48 percent of which was paid for medical and rehabilitative services. The costs to employers for workers' compensation in 2006 was $87.6 billion, equivalent to 1.58 percent of covered payrolls (down from 1.71 percent in 2005).

The Census Bureau's March Supplement to the Current Population Survey gives the following profile of those who reported receiving workers' compensation in 2007:

Workers' compensation cash benefits were less than $5,000 for 50 percent of recipients, between $5,000 and $10,000 for 20 percent, between $10,000 and $15,000 for 10 percent, and more than $15,000 for 20 percent.

Recipients' income (including workers' compensation) was below $15,000 for 18 percent, between $15,000 and $30,000 for 27 percent, between $30,000 and $45,000 for 28 percent, and above $45,000 for 27 percent.

Total family income (including workers' compensation) was below $15,000 for 8 percent of recipients, between $15,000 and $30,000 for 17 percent, between $30,000 and $45,000 for 18 percent, and above $45,000 for 57 percent. Eight percent had family income below the Federal poverty thresholds.

Rationale

This exclusion was first codified in the Revenue Act of 1918. The committee reports accompanying the Act suggest that workers' compensation payments were not subject to taxation before the 1918 Act.

No rationale for the exclusion is found in the legislative history. But it has been maintained that workers' compensation should not be taxed because it is in lieu of court-awarded damages for work-related injury or death that, before enactment of workers' compensation laws (beginning shortly before the 1918 Act), would have been payable under tort law for personal injury or sickness and not taxed.

Assessment

Exclusion of workers' compensation benefits from taxation increases the value of these benefits to injured employees and survivors, without direct cost to employers, through a tax subsidy. Taxation of workers' compensation would put it on a par with the earned income it replaces. It also would place the "true" cost of workers' compensation on employers if compensation benefits were increased in response to taxation. It is possible that "marginal" claims would be reduced if workers knew their benefits would be taxed like their regular earnings.

Furthermore, exclusion of workers' compensation payments from taxation is a relatively regressive subsidy because it replaces more income for (and is worth more to) those with higher earnings and other taxable income than for poorer households. While States have tried to correct for this with legislated maximum benefits and by calculating payments based on replacement of after-tax income, the maximums provide only a rough adjustment and few jurisdictions have moved to after-tax income replacement.

On the other hand, a case can be made for tax subsidies for workers' compensation because the Federal and State Governments have required provision of this "no-fault" benefit. Moreover, because most workers' compensation benefit levels, especially the legal maximums and the standard benefit of two-thirds of a workers' pre-injury wage, have been established knowing there would be no taxes levied, it is likely that taxation of compensation would lead to considerable pressure to increase payments.

If workers' compensation were subjected to taxation, those who could continue to work or return to work (such as those with partial or short-term disabilities) or who have other sources of taxable income (such as a working spouse or investment earnings) are likely to be the most affected. These groups represent the majority of beneficiaries. Those who receive only workers' compensation payments (such as permanently and totally disabled beneficiaries) would be less affected, because their income is likely to be below the taxable threshold level.

Some administrative issues would arise in implementing a tax on workers' compensation. Although most workers' compensation awards are made as periodic cash income replacement payments, with separate payments for

medical and other expenses, a noticeable proportion of the awards are in the form of lump-sum settlements. In some cases, the portion of the settlement attributable to income replacement can be distinguished from that for medical and other costs, in others it cannot. A procedure for pro-rating lump-sum settlements over time would be called for. If taxation of compensation were targeted on income replacement and not medical payments, some method of identifying lump-sum settlements (*e.g.*, a new kind of "1099") would have to be devised. In addition, a reporting system would have to be established for insurers (who pay most benefits), State workers' compensation insurance funds, and self-insured employers, and a way of withholding taxes might be needed.

Equity questions also would arise in taxing compensation. Some of the work force is not covered by traditional workers' compensation laws. For example, interstate railroad employees and seafaring workers have a special court remedy that allows them to sue their employer for negligence damages, similar to the system for work-related injury and death benefits that workers' compensation laws replaced for most workers. Their jury-awarded compensation is not taxed. Some workers' compensation awards are made for physical impairment, without regard to lost earnings. Under current tax law, employer-provided accident and sickness benefits generally are taxable, but payments for loss of bodily functions are excludable. Here, equity might call for continuing to exclude those workers' compensation payments that are made for loss of bodily functions as opposed to lost earnings. Finally, States would face a decision on taxing compensation and jurisdictions that use after-tax income replacement would be called on to change.

Selected Bibliography

Burton, John F., Jr. "Workers' Compensation in the United States: A Primer," *Perspectives on Work,* v. 11. Summer 2007, pp. 23-25.

Hunt, H. Allan. *Adequacy of Earnings Replacement in Workers' Compensation Programs.* Kalamazoo MI: Upjohn Institute for Employment Research. 2004.

National Foundation for Unemployment Compensation and Workers' Compensation. "Fiscal Data for State Workers' Compensation Systems: 1986-95," *Research Bulletin* 97 WC-2. September 15, 1997, pp. 1-17.

Sengupta, Ishita, et al. *Workers' Compensation: Benefits, Coverage and Costs, 2006.* Washington, DC: National Academy of Social Insurance, 2008.

Thomason, Terry, Timothy Schmidle and John F. Burton. *Workers' Compensation, Benefits, Costs, and Safety under Alternative Insurance Arrangements*. Kalamazoo MI: Upjohn Institute for Employment Research. 2001.

U.S. Congress, House Committee on Ways and Means. *2004 Green Book: Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means*. Committee Print WMCP 108-6, 108th

Congress, 2nd Session. Washington, DC: U.S. Government Printing Office, 2004, Section 15, pp. 137-148.

Welch, Edward M. *Employer's Guide to Workers' Compensation*, Washington, DC: The Bureau of National Affairs, Inc., 1994.

Wentz, Roy. "Appraisal of Individual Income Tax Exclusions," *Tax Revision Compendium*. U.S. Congress, House Committee on Ways and Means Committee Print. 1959, pp. 329-340.

Yorio, Edward. "The Taxation of Damages: Tax and Non-Tax Policy Considerations," *Cornell Law Review*, v. 62. April 1977, pp. 701-736.

EXCLUSION OF DAMAGES ON ACCOUNT OF PERSONAL PHYSICAL INJURIES OR PHYSICAL SICKNESS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.5	-	1.5
2009	1.5	-	1.5
2010	1.5	-	1.5
2011	1.6	-	1.6
2012	1.6	-	1.6

Authorization

Sections 104(a)(2)-104(a)(5)

Description

Damages paid, either through a court award or a settlement, to compensate for physical injury and sickness are not included in income of the recipient. This exclusion applies to both lump sum payments and periodic payments. They do not include punitive damages (except in certain cases where States only permit the awarding of punitive damages).

Impact

Income received in the form of damages is not taxable to individuals even though it may substitute for wages that would have been taxable. The tax treatment constitutes a benefit compared to some forms of income. To the extent that damage payments substitute for medical payments that would have been received from insurance companies the tax treatment is consistent with the treatment for medical payments that would otherwise have occurred. To the extent that the payments compensate for forgone wages, the payments

are beneficially treated by comparison with the wages (which would have been taxed). To the extent that awards are successful in reflecting the actual costs of injuries, the benefit of the provision, including the lack of tax on the interest earnings included in annuities or periodic payments, accrues to the recipients.

Rationale

A provision allowing an exclusion for damages had been part of the tax law since 1918, based on the notion that these payments were compensating for a loss. The statute was amended by the Periodic Payment Settlement Act of 1982 to allow full exclusion of periodic payments as well as lump sum payments. Normally periodic payments would have been partially taxable to reflect the interest element. An argument for encouraging the full exclusion of periodic payments was to avoid circumstances where individuals used up lump sum payments and might then require public assistance.

The provision was amended in 1996 by the Small Business Job Protection Act to make it clear that punitive damages (except for those cases where State law requires all damages to be paid as punitive damages) and damages arising from discrimination and emotional distress were not to be excluded. This change was intended to settle and clarify the law, following considerable variation in the interpretation by the courts.

Victims of Terrorism Tax Relief Act of 2001 (P.L. 107-134) expanded the present-law exclusion from gross income for disability income of U.S. civilian employees attributable to a terrorist attack outside the United States to apply to disability income received by any individual attributable to a terrorist or military action. The provision is effective for taxable years ending on or after September 11, 2001.

In general, interpretation of the provisions of these sections of the Code is frequently affected by case law.

Assessment

The tax benefit is largely a benefit to individuals receiving compensation for injuries and illness. It parallels the treatment of workers' compensation which covers on-the-job injuries. However, since it is not paid for by excluded insurance and since the size of the payments is (at least in theory) tied specifically to the magnitude of the injury, the benefit accrues to the recipients. Therefore it especially benefits higher income individuals whose payments would typically be larger, reflecting larger lifetime earnings, and subject to higher tax rates.

By restricting tax benefits to compensatory rather than punitive damages, the provision encourages plaintiffs to settle out of court so that the damages can be characterized as compensatory (an outcome that may usually be preferred by the defendant as well). There is also an incentive to characterize damages as physical in nature, for example, to demonstrate that emotional distress led to physical symptoms, so that damages are treated as compensatory rather than punitive.

Selected Bibliography

Hanson, Randall K and James K. Smith. "Taxability of Damages." *The CPA Journal*, vol. 68, May 1998, pp. 22-28.

Oestreich, Nathan, Will Snyder, and James E. Williamson. "New Rules for Personal Injury Awards." *The National Public Accountant*, vol. 43, May 1997, pp. 16-22.

U.S. Congress. Joint Committee on Taxation. *General Explanation of Tax Legislation in the 104th Congress.* U.S. Government Printing office, Washington, DC, December 18, 1996, pp. 222-224.

Wood, Robert W. "Tax Language in Settlement Agreements: Binding or Not?" *Tax Notes*, vol. 93, December 31, 2001, pp. 1872-1874.

— . "Why Every Settlement Agreement Should Address Tax Consequences." *Tax Notes*, vol. 93, July 16, 2001, pp. 405-409.

EXCLUSION OF SPECIAL BENEFITS FOR DISABLED COAL MINERS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	-	([1])
2009	([1])	-	([1])
2010	([1])	-	([1])
2011	([1])	-	([1])
2012	([1])	-	([1])

([1])Less than $50 million.

Authorization

30 U.S.C. 922(c), Section 104(a)(1), Revenue Ruling 72-400, 1972-2 C.B. 75.

Description

Cash and medical benefits to coal mine workers or their survivors for total disability or death resulting from coal workers' pneumoconiosis (black lung disease) paid under the Black Lung Benefits Act generally are not taxable. Comparable benefits paid under State workers' compensation laws also are not taxed.

Black lung eligibility claims must meet the following general conditions: the worker must be totally disabled from, or have died of, pneumoconiosis arising out of coal mine employment. However, the statute's broad definition of total disability makes it possible for a beneficiary to be working outside the coal industry (although earnings tests apply in some cases).

Black lung benefits consist of monthly cash payments and payment of black-lung-related medical costs. There are two distinct black lung programs, known as Part B and Part C. They pay the same benefits, but differ in eligibility rules and funding sources.

The Part B program provides cash benefits to those miners who filed eligibility claims prior to June 30, 1973 (or December 31, 1973, in the case of survivors). It is financed by annual Federal appropriations. The Part C program pays medical benefits for all eligible beneficiaries (both Parts B and C) and cash payments to those whose eligibility claims were filed after the Part B deadlines. Part C benefits are paid either by the "responsible" coal mine operator or, in most cases, by the Black Lung Disability Trust Fund.

To pay their obligations under the Part C program, coal mine operators may set up special "self-insurance trusts," contributions to which are tax-deductible and investment earnings on which are tax-free. Otherwise, they may fund their liability through a third-party insurance arrangement and deduct the insurance premium costs. The Black Lung Disability Trust Fund is financed by an excise tax on coal mined in and sold for use in the United States and by borrowing from the Federal Treasury.

Impact

Generally, any income-replacement amounts received for personal injury or sickness through an employer-paid accident or health plan must be reported as income for tax purposes. This includes disability payments and disability pensions, as well as sick leave. An exception is made for the monthly cash payments paid under the Federal black lung program, and comparable cash benefits paid under State workers' compensation programs, which are excluded from income taxation.

Black lung medical benefits, however, are treated like other employer-paid or government-paid health insurance. Recipients are not taxed on the employer or Federal contributions for their black lung health insurance, or on the value of medical benefits or reimbursements actually received.

In fiscal year 2008 cash benefits were paid to 66,306 primary beneficiaries and 10,442 dependents. Seventy-four percent of the primary beneficiaries were widows of miners. Both the Part B and the Part C rolls are declining as elderly recipients die. Part B cash payments totaled $273 million and Part C cash payments $202 million for the fiscal year. In addition, $38 million in payments for black-lung related medical treatment were made to, or on behalf of, miners. In calendar year 2008, monthly black lung cash payments ranged from $599 for a miner or widow alone, to $1,197 for a miner or widow with three or more dependents.

Rationale

Part B payments are excluded from taxation under the terms of title IV of the original Federal Coal Mine Health and Safety Act of 1969 (now entitled the Black Lung Benefits Act). No specific rationale for this exclusion is found in the legislative history. Part C benefits have been excluded because they are considered to be in the nature of workers' compensation under a 1972 revenue ruling and fall under the workers' compensation exclusion of Section 104(a)(1) of the Internal Revenue Code. Like workers' compensation and in contrast to other disability payments, eligibility for black lung benefits is directly linked to work-related injury or disease (see entry on Exclusion of Workers' Compensation Benefits: Disability and Survivors Payments).

Assessment

Excluding black lung payments from taxation increases their value to some beneficiaries, those with other taxable income. The payments themselves fall well below Federal income tax thresholds. The effect of taxing black lung benefits and the factors to be considered in deciding on their taxation differ between Part B and Part C payments.

Part B benefits could be viewed as earnings replacement payments and, thus, appropriate for taxation, as has been argued for workers' compensation. However, it would be difficult to argue for their taxation, especially now that practically all recipients are elderly miners or widows. When Part B benefits were enacted, the legislative history emphasized that they were not workers' compensation, but rather a "limited form of emergency assistance." They also were seen as a way of compensating for the lack of health and safety protections for coal miners prior to the 1969 Act and for the fact that existing workers' compensation systems rarely compensated for black lung disability or death. Furthermore, it can be maintained that, in effect, taxing Part B payments would take back with one hand what Federal appropriations give with the other, although almost no beneficiaries would likely pay tax, given their age, retirement status, and low income.

A stronger argument can be made for taxing Part C benefits. If workers' compensation were to be made taxable, Part C benefits would automatically be taxed because their tax-exempt status flows from their treatment as workers' compensation. Taxing Part C payments would give them the same treatment as the earnings they replace. It would remove a subsidy to those with other taxable income. On the other side, black lung benefits are legislatively established (as a percentage of minimum Federal salaries). They are not directly reflective of a worker's pre-injury earnings as is workers' compensation. They can be viewed as a special kind of disability or death "grant" that should not be taxed. Because the number of

beneficiaries on both the Part B and Part C rolls is declining, the revenue forgone from not taxing their benefits should decrease over time.

Selected Bibliography

Barth, Peter S. *The Tragedy of Black Lung: Federal Compensation for Occupational Disease.* Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 1987.

— . "Revisiting Black Lung: Can the Feds Deliver Workers' Compensation for Occupational Disease?" In *Workplace Injuries and Diseases: Prevention and Compensation*, ed. Karen Roberts, John F. Burton Jr., and Matthew M. Bodah, 253-74. Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 2005.

Lazzari, Salvatore. *The Black Lung Excise Tax on Coal*. Library of Congress. Congressional Research Service Report RS21935. Washington, DC: September 15, 2004.

McClure, Barbara. *Federal Black Lung Disability Benefits Program*. Library of Congress, Congressional Research Service Report 81-239 EPW. Washington, DC: October 27, 1981.

— . *Summary and Legislative History of P.L. 97-119, Black Lung Benefits Revenue Act of 1981*. Library of Congress, Congressional Research Service Report 82-59 EPW. Washington, DC: March 29, 1982.

Rappaport, Edward. *The Black Lung Benefits Program*. Library of Congress, Congressional Research Service Report RS21239. Washington, DC: June 12, 2002.

U.S. Congress, House Committee on Education and Labor. *Black Lung Benefits Reform Act and Black Lung Benefits Revenue Act of 1977*. Committee Print, 96th Congress, 1st session, February 1979.

— , Committee on Ways and Means. *Black Lung Benefits Trust*. Report to Accompany H.R. 13167. House Report No. 95-1656, 95th Congress, 2nd session, 1978.

— . *2004 Green Book: Background Material and Data on the Programs within the Jurisdiction of the Committee on Ways and Means*. Committee Print WMCP No. 108-6, 108th Congress, 1st session, March 2004, pp. 13:51-52; 15:145.

— , Senate Committee on Finance. *Tax Aspects of Black Lung Benefits Legislation*. Hearing, 94th Congress, 2nd session, on H.R. 10706, September 21, 1976.

— , Committee on Finance, Subcommittee on Taxation and Debt Management Generally. *Tax Aspects of the Black Lung Benefits Reform Act of 1977.* Hearing, 95th Congress, 1st session, on S. 1538, June 17, 1977.

Walter, Douglas H. "Tax Changes Effected by the Black Lung Revenue Act of 1977," *Taxes*, v. 56, May 1978, pp. 251-254.

EXCLUSION OF CASH PUBLIC ASSISTANCE BENEFITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	3.0	-	3.0
2009	3.0	-	3.0
2010	3.1		3.1
2011	3.4	-	3.4
2012	4.4	-	4.4

Authorization

The exclusion of public assistance payments is not specifically authorized by law. However, a number of revenue rulings under Section 61 of the Internal Revenue Code, which defines "gross income," have declared specific types of means-tested benefits to be nontaxable.

Description

The Government provides public assistance benefits tax free to individuals either in the form of cash welfare or noncash transfers (in-kind benefits such as certain goods and services received free or for an income-scaled charge). Cash payments come from programs such as Temporary Assistance for Needy Families (TANF), which replaced Aid to Families with Dependent Children during FY 1997, Supplemental Security Income (SSI) for the aged, blind, or disabled, and State and local programs of General Assistance (GA), known also by other names such as Home Relief or Safety Net.

Traditionally, the tax benefits from in-kind payments have *not* been included in the tax expenditure budget because of the difficulty of determining their value to recipients. (However, the Census Bureau publishes estimates of the value and distribution of major noncash welfare benefits.)

Impact

Exclusion of public assistance cash payments from taxation gives no benefit to the poorest recipients and has little impact on the incomes of many. This is because welfare payments are relatively low and many recipients have little if any non-transfer cash income. For example, TANF payments per family (averaging 2.8 persons) averaged $372 monthly in FY2006, far below the federal income tax threshold. Further, relatively few TANF families have earnings (18% of adult recipients reported earnings in FY2006), and these earnings usually qualify for the earned income tax credit. If family cash welfare payments were made taxable, most recipients still would owe no tax.

However, some welfare recipients do benefit from the exclusion of public assistance cash payments. They are persons who receive relatively high cash aid (including aged, blind, and disabled persons enrolled in SSI in States that supplement the basic federal income guarantee, which is $637 monthly per individual and $956 per couple in 2008) and persons who have earnings for part of the year and public assistance for the rest of the year (and whose actual annual cash income would exceed the taxable threshold if public assistance were counted). Public assistance benefits are based on monthly income, and thus families whose fortunes improve during the year generally keep welfare benefits received earlier.

During FY2006, TANF ongoing cash benefits were received by a monthly average of about 4.7 million persons in 2.0 million families. As of December, 2006, 6.9 million persons received federal SSI benefits (and another 297,000 received federally administered SSI supplements paid with State funds). Most recipients of cash help also receive some non-cash aid.

An unpublished Census Bureau table (*Income Distribution Measures, by Definition of Income, 2005*) estimates that in 2004, $40.7 billion was received in means-tested cash transfers from TANF, SSI, GA, and veterans' pensions. Per recipient household, cash payments averaged $6,378. A total of 6.4 million households (5.6% of all U.S. households) were estimated to have received aid from one of the means-tested cash programs, and 54.5% of these households were in the bottom quintile of the income distribution. (Note: Means-tested veterans' benefits are included in cash transfers by the Census Bureau.) The Census Bureau estimated that other means-tested cash aid totaling $29.2 billion was received in the form of federal and State earned income tax credits. These credits went to an estimated 16.3 million households, 60.0% of whom were in the two lowest quintiles of the income distribution. The average value of earned income tax credits in 2005 was estimated to be $1,799 per recipient household.

In addition, the Census Bureau estimates that the 2005 value of major *noncash* means-tested benefits at $97.3 billion. The Bureau estimated the

noncash transfer for Medicaid at $62.9 billion ($4,562 on average per recipient household, counting only households with a Medicaid transfer), and the value of other noncash aid at $34.4 billion. On average, recipient households received an estimated $2,295 in other noncash aid. Of the 13.8 million estimated households receiving a noncash transfer for Medicaid, 49.9% were in the lowest two quintiles of the income distribution.

Rationale

Revenue rulings generally exclude government transfer payments from income because they have been considered to have the nature of "gifts" in aid of the general welfare. While no specific rationale has been advanced for this exclusion, the reasoning may be that Congress did not intend to tax with one hand what it gives with the other.

Assessment

Several reasons are advanced for treating means-tested cash payments as taxable income. First, excluding these cash payments results in treating persons with the same cash income differently.

Second, removing the exclusion would not harm the poorest because their total cash income still would be below the income tax thresholds.

Third, the general view of cash welfare has changed. Cash benefits to TANF families now widely are regarded not as "gifts" but as payments that impose obligations on parents to work or prepare for work through schooling or training, and many GA programs require work. Thus, it may no longer be appropriate to treat cash welfare transfers as gifts. (The SSI program imposes no work obligation, but offers a financial reward for work.)

Fourth, the exclusion of cash welfare increases the work disincentives inherent in need-tested aid. A welfare recipient who goes to work replaces some nontaxable cash with taxable income. This increases his/her potential "marginal tax" rate. (When recipients work, they face a reduction in need-tested benefits. The loss in benefits serves as a "tax", which increases the marginal tax rate.)

Fifth, using the tax system to subsidize needy persons without direct spending masks the total cost of aid and is inefficient.

Sixth, taxing welfare payments would increase the ability to integrate the tax and transfer system.

Several objections are made to the removal of the tax exemption from means-tested cash transfers. First, cash welfare programs have the effect of

providing guarantees of minimum cash income; these presumably represent target levels of disposable income. Making these benefits taxable might reduce disposable income below the targets.

Second, unless the income tax thresholds were set high enough, some persons deemed needy by their State might be harmed by the change (a recipient may be subject to federal, State, or local income taxes based on different income thresholds). TANF and SSI minimum income guarantees differ by State, but the federal tax threshold is uniform for taxpayers with the same filing status and family size. If cash welfare payments were made taxable, the actual effect would vary among the States.

Third, if cash welfare were made taxable, it is argued that noncash welfare also should be counted (raising difficult measurement issues). Further, if noncash means-tested benefits were treated as income, it is argued that other noncash income (ranging from employer-paid health insurance to tax deductions for home mortgage interest) also should be counted, raising new problems. Fourth, the public might perceive the change (to taxing cash or noncash welfare) as violating the social safety net, and, thus, object.

Selected Bibliography

AFL-CIO. *Recommendations on tax treatment of welfare-to-work payments*. Memo prepared on May 8, 1998 on behalf of the AFL-CIO, and at the request of the Treasury. See *Tax Notes*, June 8, 1998, p. 1239.

Entin, Stephen J. "Fundamental Tax Reform: The Inflow Outflow Tax __. A Savings-Deferred Neutral Tax System." Prepared testimony before the House Committee on Ways and Means, April 13, 2000.

Weisbach, David A. and Jacob Nussim. "The Integration of Tax and Spending Programs," *Yale Law Journal*, March 2004, p. 955.

EARNED INCOME CREDIT (EIC)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Refundable	Nonrefundable	Total
2008	42.4	6.2	48.6
2009	44.3	6.3	50.6
2010	45.3	6.4	51.7
2011	41.7	7.9	49.6
2012	41.0	8.7	49.7

Authorization

Section 32.

Description

Eligible married couples and single individuals meeting certain earned income and adjusted gross income (AGI) limits may be eligible for an earned income credit (EIC). For purposes of the credit, earned income includes wages, salaries, tips, and net income from self employment. In addition to earned income and AGI, the value of the credit will depend on whether or not the taxpayer has a qualifying child. A qualifying child for the EIC must meet the following three criteria for a qualifying child for the personal exemption: (1) relationship - the child must be a son, daughter, stepson, stepdaughter, or descendent of such a relative; a brother, sister, stepbrother, stepsister, or descendent of such a relative cared for by the taxpayer as his/her own child; or a foster child; (2) residence - the child must live with the taxpayer for more than half the year; and (3) age - the child must be under age 19 (or under age 24, if a full-time student) or be permanently and totally disabled. If a taxpayer does not have a qualifying child, the taxpayer must be at least 25 years of age but not more than 64 years of age, be a resident of the United States for more than half of the year, and not be claimed as a dependent on another taxpayer's return. A taxpayer will be

disqualified from receiving the credit if investment income exceeds a specified amount ($3,100 in tax year 2009, the amount is indexed for inflation). Married couples generally must file a joint tax return.

The EIC increases with earnings up to a maximum, remains flat for a given range of income, and then declines to zero as income continues to increase. The credit is calculated as a percentage of the taxpayer's earned income up to a statutory maximum earned income amount. The credit remains at this maximum until earned income or AGI (whichever is larger) reaches a point at which it begins to phase out. Above this level, the EIC is reduced (phased out) by a percentage of the income above the phase out income amount. The maximum earned income and phase out income amounts are adjusted for inflation.

For tax year 2009, the maximum EIC is equal to 34.0 percent of the first $8,950 of earned income for one qualifying child (i.e. the maximum basic credit is $3,043) and 40.0 percent of earned income up to $12,570 for two or more qualifying children (i.e. the maximum basic credit is $5,028).

For individuals with children, in tax year 2009, the EIC begins to phase out at $16,420 of earned income or AGI, whichever is larger. For married couples with children the phase out begins at an income level of $19,540. For families above the phase out income amount, the credit is phased out at a rate of 15.98 percent of income above the phase out income level for one qualifying child, and 21.06 percent for two or more qualifying children.

For married couples and individuals without children, in tax year 2009, the EIC is 7.65 percent of the first $5,970 for a maximum credit of $457. The credit begins to phase out at $7,470 of earned income (or AGI whichever is larger) and at a 7.65 percent rate. For married couples with children the phase out begins at an income level of $10,590. The maximum earned income and phase out income amounts are adjusted for inflation.

If the credit is greater than Federal income tax owed, the difference is refunded. The portion of the credit that offsets (reduces) income tax is a reduction in tax collections, while the portion refunded to the taxpayer is treated as an outlay. For FY2008, the refundable portion of the EIC is projected to be 87.2 percent of the total EIC. Working parents may arrange with their employers to receive the credit in advance (before filing an annual tax return) through reduced tax withholding during the year.

While gross income for tax purposes does not generally include certain combat pay earned by members of the armed forces, members of the armed forces can elect to include this combat pay for purposes of computing the earned income credit.

Impact

The earned income credit increases the after-tax income of lower- and moderate-income working couples and individuals, particularly those with children. Alternative measures of income by the U.S. Census Department, which are designed to show the impact of taxes and transfers on poverty, estimate that the earned income credit (after taxes) reduced the number of people in poverty in 2005 by approximately 4.4 million. Because the number of people in poverty is 40.6 million before the EIC and after taxes (using an alternative income definition, and not the official definition), the reduction due to the EIC is 10.9%.

The following table provides estimates of the distribution of the earned income credit tax expenditure by income level, and includes the refundable portion of the credit. Because the estimates use an expanded definition of income, the estimates contain a distribution for incomes above the statutory limits. For further information on the definition of income see page 5 of the introduction to this document.

Distribution by Income Class of the Tax Expenditure for the Earned Income Credit, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	14.1
$10 to $20	36.3
$20 to $30	26.8
$30 to $40	15.1
$40 to $50	6.1
$50 to $75	1.6
$75 to $100	0.0
$100 to $200	0.0
$200 and over	0.0

Rationale

The earned income credit was enacted by the Tax Reduction Act of 1975 as a temporary refundable credit to offset the effects of the social security tax and rising food and energy costs on lower income workers and to provide a work incentive for parents with little or no earned income.

The credit was temporarily extended by the Revenue Adjustment Act of 1975, the Tax Reform Act of 1976, and the Tax Reduction and Simplification Act of 1977. The Revenue Act of 1978 made the credit

permanent, raised the maximum amount of the credit, and provided for advance payment of the credit. The 1978 Act also created a range of income for which the maximum credit is granted before the credit begins to phase out.

The maximum credit was raised by both the Deficit Reduction Act of 1984 and the Tax Reform Act of 1986. The 1986 Act also indexed the maximum earned income and phase out income amounts to inflation. The Omnibus Budget Reconciliation Act (OBRA) of 1990 increased the percentage used to calculate the credit, created an adjustment for family size, and created supplemental credits for young children (under age 1) and health insurance.

OBRA 1993 increased the credit, expanded the family-size adjustment, extended the credit to individuals without children, and repealed the supplemental credits for young children and health insurance. To increase compliance, the Taxpayer Relief Act of 1997 included a provision denying the credit to persons improperly claiming the credit in prior years.

The Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001 simplified calculation of the credit by excluding nontaxable employee compensation from earned income, eliminating the credit reduction due to the alternative minimum tax, and using adjusted gross income rather than modified adjusted gross income for calculation of the credit phase out. EGTRRA also expanded the phase out range for married couples filing a joint return to reduce the marriage penalty. The EGTRRA changes do not apply to tax years after 2010.

Assessment

The earned income credit raises the after-tax income of several million lower- and moderate-income families, especially those with children. The credit has been promoted as an alternative to raising the minimum wage, as a method for reducing the burden of social security tax increases, and as an incentive to work. The credit has, in dollar terms, become the largest cash welfare program.

Up to the maximum earned income amount (at which the credit reaches a maximum) the credit generally provides a work incentive: the more a person earns, the greater the amount of the credit. But within the income range over which the credit is phased out, the credit may act as a work disincentive: as the credit declines, the taxes owed increase. As income increases a credit recipient may switch from receiving a refund (because of the credit) to receiving no credit or paying taxes. The combination of higher taxes and a lower credit increases the marginal tax rate of the individual. The marginal tax rate may in many cases be higher than the rate for taxpayers with substantially higher incomes. This creates an incentive for

the individual to reduce work hours (to avoid the increase in taxes and maintain the credit).

While the credit encourages single parents to enter the work force, the decline of the credit above the phase out amount can discourage the spouse of a working parent from entering the workforce. This "marriage penalty" may also discourage marriage when one or both parties receive the earned income credit. EGTRRA may have moderated this effect somewhat.

Some eligible individuals do not receive the credit because of incorrect or incomplete tax return information, or because they do not file. Conversely, payments to ineligible individuals, and overpayments to eligible recipients, have been a source of concern, resulting in IRS studies of EIC compliance and federally funded initiatives to improve administration of the credit. For tax year 2003, the IRS conducted a pre-certification study in which approximately 25,000 tax filers were asked to certify, before filing their tax returns, that the child claimed for the credit had lived with the tax filer for more than half of the tax year (making the child a qualifying child for the taxpayer to claim the EIC). The final report estimated that erroneous claims related to the child residency requirement were $2.9 to $3.3 million. However, the study also estimated that there was a reduction in the credit claimed by eligible claimants of between $1.1 and $1.4 million due to the unintended deterrence effect of the pre-certification study.

The credit also differs from other transfer payments in that most individuals receive it as an annual lump sum rather than as a monthly benefit. Very few credit recipients elect advance payments. There are a number of reasons why a recipient may not choose advance payments, including not wanting to inform an employer that he/she is a credit recipient. A recipient may also be making a choice between consumption (using advance payments for current needs) and savings (using an annual payment for future needs or wants).

Selected Bibliography

Dickert-Conlin, Stacy, and Scott Houser. "EITC and Marriage," *National Tax Journal*, v. 55, no. 1, March 2002, pp. 25-43.

Ellwood, David T. "The Impact of the Earned Income Tax Credit and Social Policy Reforms on Work, Marriage, and Living Arrangements," *National Tax Journal*, v. 53, no. 4, part 2, December 2000, pp. 1063 - 1106.

Gravelle, Jane G. *The Earned Income Tax Credit (EITC): Effects on Work Effort*, Library of Congress, Congressional Research Service Report 95-928. Washington, DC: August 30, 1995.(Available upon request from author)

Gravelle, Jane G. *The Marriage Penalty: An Overview of the Issues*, Library of Congress, Congressional Research Service Report RL30419. Washington, DC: June 21, 2001.

Gravelle, Jane G. And Jennifer Gravelle, Horizontal Equity and Familty Tax Treatment: The Orphan Child of Tax Policy, National Tax Journal, v.59, n.3, September 2006.

Holtzblatt, Janet, and Robert Rebelein. "Measuring the Effect of the EITC on Marriage Penalties and Bonuses," *National Tax Journal*, v. 53, no. 4, part 2, December 2000, pp. 1107 - 1129.

Horowitz, John B. "Income Mobility and the Earned Income Credit," *Economic Inquiry*, v. 40, n. 3, July 2001, pp. 334-347.

Hotz, V. Joseph, and John Karl Scholz, *The Earned Income Tax Credit,* National Bureau of Economic Research Working Paper 8078, January 2001.

Liebman, Jefferey B. "Who are the ineligible EITC Recipients?" *National Tax Journal*, v. 53, n. 4, part 2, December 2000, pp. 1165 - 1190.

McCubbin, Janet. "EITC Noncompliance: the Determinants of the Misreporting of Children," *National Tax Journa*l, v. 53, no. 4, part 2, December 2000, pp. 1135 - 1163.

Meyer, Bruce and Dan T. Rosenbaum, "Making Single Mothers Work: Recent Tax and Welfare Policy and its Effects," *National Tax Journal*, v. 53, no. 4, part 2, December 2000, pp. 1027 - 1054.

Moffit, Robert. *Welfare Programs and Labor Supply*, National Bureau of Economic Research Working paper 9168, September 2002.

Neumark, David, and William Wascher. "Using the EITC to Help Poor Families: New Evidence and a Comparison with the Minimum Wage," *National Tax Journal,* v.54, no. 2, June 2001, pp. 281-317.

Scholz, John Karl. In "Work Benefits in the United States: The Earned Income Tax Credit, *Economic Journal*, v. 106, n. 1, January 1996, pp. 159-169.

Scott, Christine, *The Earned Income Credit (EITC): Legislative Issues*, Library of Congress, Congressional Research Service Report RS21477. Washington, DC., 2008.

Scott, Christine, *The Earned Income Credit (EITC): An Overview*, Library of Congress, Congressional Research Service Report RL31768. Washington, DC., 2008.

Smeeding, Timothy M., Katherine Ross Phillis and Michael O'Conner, "The EITC: Expectation, Knowledge, Use, and Economic and Social Mobility", *National Tax Journal*, v. 53, no. 4, part 2, December 2000, pp. 1187 - 2109.

U.S. Census Department, *Poverty in the United States: 2001*, September 2002.

U. S. Census Department, Current Population Survey, Annual Demographic Supplement, Historical Poverty Tables - Table 5, September 2002.

U.S. Congress, House Committee on Ways and Means. *Background Materials: 1998 Green Book, Committee Print, 106th Congress, 2nd session. December 22, 2000, pp. 547-552.*

U.S. General Accounting Office. *"Earned Income Tax Credit: Qualifying Child Certification Test Appears Justified, but Evaluation Plan Is Incomplete."* GAO-03-794. Washington, D.C., September 2003.

U.S. Department of Treasury, Internal Revenue Service, *Compliance Estimates for Earned Income Tax Credit Claimed on 1999 Returns*. February 2002.

U.S. Department of the Treasury, Internal Revenue Service, *IRS Earned Income Tax Credit (EITC) Initiative, Final Report to Congress*, October 2005.

Ventry, Dennis J. "The Collision of Tax and Welfare Politics: The Political History of the Earned Income Credit, 1969-99", *National Tax Journal*, v. 53 n. 4, part 2, pp. 983 - 1026.

ADDITIONAL STANDARD DEDUCTION FOR THE BLIND AND THE ELDERLY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.0	-	2.0
2009	1.9	-	1.9
2010	1.8	-	1.8
2011	2.2	-	2.2
2012	2.6	-	2.6

Authorization

Section 63(f).

Description

An additional standard deduction is available for blind and elderly taxpayers. To qualify for the additional standard deduction amount, a taxpayer must be age 65 (or blind) before the close of the tax year. The added standard deduction amounts, $1,100 for a married individual or surviving spouse or $1,400 for an unmarried individual for tax year 2009, are added to the basic standard deduction amounts. A couple could receive additional deductions totaling $4,400 if both were blind and elderly. These amounts are adjusted for inflation.

Impact

The additional standard deduction amounts raise the income threshold at which taxpayers begin to pay taxes. The benefit depends on the marginal tax rate of the individual. About three-quarters of the benefits go to taxpayers with incomes under $50,000.

Distribution by Income Class of the Tax Expenditure for the Additional Standard Deduction Amount for the Blind and Elderly at 2006 Income Levels

Adjusted Gross Income Class (in thousands of $)	Percentage Distribution
Below $10	17.9
$10 to $20	25.3
$20 to $30	15.7
$30 to $40	9.9
$40 and over	31.2

Source: Data obtained from IRS *Statistics of Income*, http://www.irs.gov/pub/irs-soi/06in14ar.xls visited Oct. 31, 2008. Amounts may not add up due to rounding.

Note: This is not a distribution of the tax expenditures, but of the deductions. It is classified by adjusted gross income, not expanded adjusted gross income.

Rationale

Special tax treatment for the blind first became available under a provision of the Revenue Act of 1943 (P.L. 78-235) which provided a $500 itemized deduction. The purpose of the deduction was to help cover the additional expenses directly associated with blindness, such as the hiring of readers and guides. The deduction evolved to a $600 personal exemption in the Revenue Act of 1948 (P.L. 80-471) so that the blind did not forfeit use of the standard deduction and so that the tax benefit could be reflected directly in the withholding tables.

At the same time that the itemized deduction was converted to a personal exemption for the blind, relief was also provided to the elderly by allowing them an extra personal exemption. Relief was provided to the elderly because of a heavy concentration of small incomes in that population, the rise in the cost of living, and to counterbalance changes in the tax system resulting from World War II. It was argued that those who were retired could not adjust to these changes and that a general personal exemption was preferable to piecemeal exclusions for particular types of income received by the elderly.

As the personal and dependency exemption amounts increased over the years, so too did the amount of the additional exemption. The exemption amount increased to $625 in 1970, $675 in 1971, $750 in 1972, $1,000 in 1979, $1,040 in 1985 and $1,080 in 1986.

A comprehensive revision of the Code was enacted in 1986 designed to lead to a fairer, more efficient and simpler tax system. Under a provision in the Tax Reform Act of 1986 (P.L. 99-514) the personal exemptions for age and blindness were replaced by an additional standard deduction amount. This change was made because higher income taxpayers are more likely to itemize and because a personal exemption amount can be used by all taxpayers whereas the additional standard deduction will be used only by those who forgo itemizing deductions. Thus, the rationale is to target the benefits to lower and moderate income elderly and blind taxpayers.

Assessment

Advocates of the blind justify special tax treatment based on higher living costs and additional expenses associated with earning income. However, other taxpayers with disabilities (deafness, paralysis, loss of limbs) are not accorded similar treatment and may be in as much need of tax relief. Just as the blind incur special expenses so too do others with different handicapping impairments.

Advocates for the elderly justify special tax treatment based on need, arguing that the elderly face increased living costs primarily due to inflation; medical costs are frequently cited as one example. However, social security benefits are adjusted annually for cost inflation and the federal government has established the Medicare Program. Opponents of the provision argue that if the provision is retained the eligibility age should be raised. It is noted that life expectancy has been growing longer and that most 65 year olds are healthy and could continue to work. The age for receiving full Social Security benefits has been increased for future years.

One notion of fairness is that the tax system should be based on ability-to-pay and that ability is based upon the income of taxpayers — not age or handicapping condition. The additional standard deduction amounts violate the economic principle of horizontal equity in that all taxpayers with equal net incomes are not treated equally. The provision also fails the effectiveness test since low-income blind and elderly individuals who already are exempt from tax without the benefit of the additional standard deduction amount receive no benefit from the additional standard deduction but are most in need of financial assistance.

Nor does the provision benefit those blind or elderly taxpayers who itemize deductions (such as those with large medical expenditures in relation to income). Additionally, the value of the additional standard deduction is of greater benefit to taxpayers with a higher rather than lower marginal income tax rate. Alternatives would be a tax credit or a direct grant.

Selected Bibliography

Chen, Yung-Ping. "Income Tax Exemptions for the Aged as a Policy Instrument," *National Tax Journal*, v. 16, no. 4. December 1963, pp. 325-336.

Ehrenhalt, Alan. "The Temptation to Hand Out Irrelevant Entitlements," *Governing*, v. 9 (November 1995), pp. 7-8.

Forman, Jonathan Barry. "Reconsidering the Income Tax Treatment of the Elderly: It's Time for the Elderly to Pay Their Fair Share," *University of Pittsburgh Law Review*, v. 56, Spring 1995, pp. 589-626.

Groves, Harold M. *Federal Tax Treatment of the Family*. Washington, DC: The Brookings Institution, 1963, pp. 52-55.

Kahn, Jeffrey. "Personal Deductions - A Tax "Ideal" or Just Another "Deal"?" *Law Review of Michigan State University - Detroit College of Law*, Spring 2002, pp. 1-55.

Lightman, Gary P. "Tax Expenditure Analysis of I.R.C. §151(d), The Additional Exemption for the Blind: Lack of Legislative Vision?" *Temple Law Quarterly,* v. 50, no. 4. 1977, pp. 1086-1104.

Livsey, Herbert C. "Tax Benefits for the Elderly: A Need for Revision." *Utah Law Review,* v. 1969, No. 1. 1969, pp. 84-117.

Jackson, Pamela J. *Additional Standard Tax Deduction for the Blind: A Description and Assessment*, Library of Congress, Congressional Research Service Report RS20555. July 12, 2006.

— . *Additional Standard Tax Deduction for the Elderly: A Description and Assessment*, Library of Congress, Congressional Research Service Report RS20342. June 28, 2006.

Tate, John. "Aid to the Elderly: What Role for the Income Tax?" *University of Cincinnati Law Review,* v. 41, no. 1. 1972, pp. 93-115.

U.S. Congress, House Committee on Ways and Means. *2000 Green Book; Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*. Committee Print, 106th Congress, 2d Session. October 6, 2000, pp. 822-823.

— . *Overview of Entitlement Programs.* May 15, 1992, pp. 1035-1037.

U.S. President (Reagan). *The President's Tax Proposals to the Congress for Fairness, Growth and Simplicity.* Washington, DC: U.S. Government Printing Office, 1985, pp. 11-14.

TAX CREDIT FOR THE ELDERLY AND DISABLED

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	-	([1])
2009	([1])	-	([1])
2010	([1])	-	([1])
2011	([1])	-	([1])
2012	([1])	-	([1])

([1])Positive tax expenditure of less than $50 million.

Authorization

Section 22.

Description

Individuals who are 65 years of age or older may claim a tax credit equal to 15 percent of their taxable income up to a base amount. The credit is also available to individuals under the age of 65 if they are retired because of a permanent and total disability and have disability income from either a public or private employer based upon that disability. The maximum base amount for a married couple where both spouses are 65 or over is $7,500. When one spouse is 65 or over and the other spouse is under 65 but disabled, the maximum amount is the lesser of $7,500 or $5,000 plus "disability income" (income from wages, or payments in lieu of wages, due to disability).

A maximum base amount of $5,000 is provided for a single taxpayer 65 or over and a married couple where only one spouse is over 65. Where both are under 65 and both are disabled, the maximum base amount is the lesser of $7,500 or total "disability income." When one is disabled but neither is

65 or over or in the case of a single disabled individual under 65, the maximum base amount is the lesser of $5,000 or "disability income." For a married individual filing separately the maximum base amount is $3,750 (the lesser of $3,750 or the "disability income" received if disabled).

The maximum base amount is reduced by certain amounts received as pensions or disability benefits which are excluded from gross income (such as nontaxable pension or annuity income, social security benefits, railroad retirement, and veterans benefits). Also, a reduction from the maximum base amount is made by one-half of the excess over the following amounts: $7,500 adjusted gross income (AGI) for a single individual, $10,000 for a joint return, or $5,000 for a married individual filing a separate return.

Impact

The maximum credit per individual is $750 (15 percent of $5,000) and $1,125 in the case of a married couple both 65 or over (15 percent of $7,500). Because the base amount is reduced by Social Security benefits, the primary beneficiaries are persons with disabilities and retirees who are not eligible to receive tax-exempt Social Security benefits.

Because the provision is a credit, its value to the taxpayer is affected only by the level of benefits and the credit rate, and not by the tax bracket of the taxpayer. However, the adjusted gross income phaseout serves to limit relief to low- and very-moderate-income taxpayers. Additionally, tax credits are used to reduce income tax liability, as opposed to tax deductions which reduce income available to be taxed. Individuals with low tax liabilities may be ineligible to claim the credit, or the full value of the credit, since it is nonrefundable.

Preliminary Distribution by Income Class of the Tax Expenditure for Credit for the Elderly and Disabled at 2006 Income Levels

Adjusted Gross Income Class (in thousands of $)	Percentage Distribution
Below $10	2.2%
$10 to $20	89.5%
$20 to $30	8.3%
$30 and over	0.0%

Source: Data obtained from IRS *Statistics of Income*, http://www.irs.gov/pub/irs-soi/06in33ar.xls visited Nov. 3, 2008. Amounts may not add up due to rounding.

Note: This table classifies by adjusted gross income, not expanded adjusted gross income.

Rationale

The retirement income credit first enacted with the codification of the Internal Revenue Code of 1954 (P.L. 83-591) was intended to remove the inequity between individuals who received taxable retirement income with those who received tax-exempt Social Security payments. In 1976, the retirement income credit was redesigned into the tax credit for the elderly.

In the Social Security Amendments of 1983 (P.L. 98-21), Social Security benefits were made taxable above certain income levels. In response to this change the tax credit's base amounts were increased to provide some coordination with the level at which Social Security benefits became taxable. In addition, the credit for the elderly was expanded to include those permanently and totally disabled. This change was designed to provide the same tax relief to aged and disabled taxpayers who do not receive tax-free Social Security retirement or disability payments.

Assessment

While the tax credit affords some elderly and disabled taxpayers receiving taxable retirement or disability income a measure of comparability with those receiving tax-exempt (or partially tax-exempt) Social Security benefits, it does so only at low-income levels because of the adjusted gross income phaseout. Social Security recipients with higher levels of income always continue to receive at least a portion of their Social Security income tax free. Such is not the case for those who use the tax credit.

The Congress has not reviewed the tax credit to provide inflation adjustments since 1983. Therefore, tax relief currently provided by the tax credit lags behind tax relief provided to Social Security recipients. Thus, as Social Security income continues to increase with the consumer price index (CPI), a greater differential will exist between the value of the tax credit and the portion of Social Security income that is tax exempt.

The provision has been criticized for being relatively complex, with some taxpayers unaware of its availability.

Selected Bibliography

Butrica, Barbara A., Richard W. Johnson, Karen E. Smith, and C. Eugene Steuerle. "The Implicit Tax on Work at Older Ages," *National Tax Journal*, vol. 59, (June 2006.), pp. 211-234.

Cairns, Scott N. and Diane A. Riordan. "Nonbusiness Credits: A Proposal for Change Based on Break-Even Analysis. Reforming the Elderly or Permanently Disabled Credit and the Dependent and Child Care Credit," *Taxes*, v. 70 (May 1992), pp. 347-356.

Dickert-Conlin, Stacy, Katie Fitzpatrick, and Andrew Hanson. "Utilization of Income Tax Credits by Low-Income Individuals," *National Tax Journal*, vol.58, iss. 4 (Dec. 2005), pp. 743-785.

Forman, Jonathan Barry. "Reconsidering the Income Tax Treatment of the Elderly: It's Time for the Elderly to Pay Their Fair Share," *University of Pittsburgh Law Review*, v. 56, Spring 1995, pp. 589-626.

Hulse, David S. "Is Inflation Phasing Out the Credit for the Elderly," *Tax Notes*, v. 60 (July 12, 1993), pp. 211-216.

U.S. Department of the Treasury. Internal Revenue Service. *Publication 524: Credit for the Elderly or the Disabled*. 2003.

U.S. Department of the Treasury. Internal Revenue Service. *National Taxpayer Advocate, FY 2001 Annual Report to Congress*. December 31, 2001, pp. 218-219.

U.S. Congress, House Committee on Ways and Means. "*2000 Green Book; Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*." Committee Print, 106th Congress, 2d Session. October 6, 2000, pp. 823-824.

— . *Overview of Entitlement Programs; 1998 Green Book; Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means.* Washington, DC: U.S. Government Printing Office, May 19, 1998, pp. 882-883.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Tax Reform Act of 1976 (H.R. 10612, 94th Congress, Public Law 94-455).* Washington, DC: U.S. Government Printing Office, December 29, 1976, pp. 117-123.

U.S. President (1981-1989: Reagan). *The President's Tax Proposals to the Congress for Fairness, Growth and Simplicity*. 1985, pp. 11-14.

DEDUCTION FOR CASUALTY AND THEFT LOSSES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.2	-	0.2
2009	0.2	-	0.2
2010	0.2	-	0.2
2011	0.2	-	0.2
2012	0.3	-	0.3

Authorization

Sections 165(c)(3), 165(e), 165(h) - 165(k).

Description

An individual may claim an itemized deduction for unreimbursed personal casualty or theft losses in excess of $500 per event (for 2009 and later tax years; $100 prior to that) and in excess of 10 percent of adjusted gross income (AGI) for combined net losses during the tax year. Eligible losses are those arising from fire, storm, shipwreck, or other casualty, or from theft. The cause of the loss should be considered a sudden, unexpected, and unusual event.

The Katrina Emergency Tax Relief Act of 2005 (P.L. 109-73) eliminated limitations of deductible losses arising from the consequences of Hurricane Katrina. Such losses are deductible without regard to whether aggregate net losses exceed 10 percent of the taxpayer's adjusted gross income, and need not exceed $100 per casualty or theft. Similarly, the limitations are removed for losses arising from the Hurricanes Rita and Wilma, 2007 Kansas storms and tornados, and 2008 Midwestern floods, severe storms, and tornadoes.

The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) expanded the applicability of the deduction for losses attributable to a federally declared disaster occurring in 2008 and 2009. Taxpayers may claim the deduction for losses in addition to the standard deduction. Such losses are deductible without regard to whether the losses exceed 10 percent of a taxpayer's adjusted gross income. In addition, taxpayers may elect to deduct the loss on their returns for the immediately preceding tax year rather than on a current-year return.

In 2008, IRS Chief Counsel determined that investors may be able to claim a theft loss deduction for losses sustained in connection with loans to a lending company engaged in writing subprime mortgages in the year that a fraudulent scheme was discovered (IRS Office of Chief Council Memorandum Number 200811016, Release Date: March 14, 2008).

Impact

The deduction grants some financial assistance to taxpayers who suffer substantial casualties and itemize deductions. It shifts part of the loss from the property owner to the general taxpayer and thus serves as a form of government coinsurance. Use of the deduction is low for all income groups.

There is no maximum limit on the casualty loss deduction. If losses exceed the taxpayer's income for the year of the casualty, the excess can be carried back or forward to another year without reapplying the $100 and 10 percent floors. A dollar of deductible losses is worth more to taxpayers in higher income tax brackets because of their higher marginal tax rates. The deduction is unavailable for taxpayers who do not itemize. Typically, lower income taxpayers tend to be less likely to itemize the deductions.

Rationale

The deduction for casualty losses was allowed under the original 1913 income tax law without distinction between business-related and non-business-related losses. No rationale was offered then.

The Revenue Act of 1964 (P.L. 88-272) placed a $100-per-event floor on the deduction for personal casualty losses, corresponding to the $100 deductible provision common in property insurance coverage at that time. The deduction was intended to be for extraordinary, nonrecurring losses which go beyond the average or usual losses incurred by most taxpayers in day-to-day living.

The $100 floor was intended to reduce the number of small and often improper claims, reduce the costs of record keeping and audit, and focus the deduction on extraordinary losses. The amount of the floor is not adjusted

for inflation, however. Thus, the effectiveness of the $100 floor eroded with time: the floor should be at about $700 in 2008 to compensate for the effects of inflation. Raising the floor to $500, as authorized by Emergency Economic Stabilization Act of 2008, largely restores the effectiveness of this limitation.

The Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248) provided that the itemized deduction for combined nonbusiness casualty and theft losses would be allowed only for losses in excess of 10 percent of the taxpayer's AGI. While Congress wished to maintain the deduction for losses having a significant effect on an individual's ability to pay taxes, it included a percentage-of-adjusted-gross-income floor because it found that the size of a loss that significantly reduces an individual's ability to pay tax varies with income.

The casualty loss deduction is exempt from the overall limit on itemized deductions for high-income taxpayers.

Assessment

Critics have pointed out that when uninsured losses are deductible but insurance premiums are not, the income tax discriminates against those who carry insurance and favors those who do not. It similarly discriminates against people who take preventive measures to protect their property but cannot deduct their expenses. No distinction is made between loss items considered basic to maintaining the taxpayer's household and livelihood versus highly discretionary personal consumption. The taxpayer need not replace or repair the item in order to claim a deduction for an unreimbursed loss.

Up through the early 1980s, while tax rates were as high as 70 percent and the floor on the deduction was only $100, high income taxpayers could have a large fraction of their uninsured losses offset by lower income taxes, providing them reason not to purchase insurance. IRS statistics for 1980 show a larger percentage of itemized returns in higher income groups claiming a casualty loss deduction.

The imposition of the 10-percent-of-AGI floor effective in 1983, together with other changes in the tax code during the 1980s, substantially reduced the number of taxpayers claiming the deduction. In 1980, 2.9 million tax returns, equal to 10.2 percent of all itemized returns, claimed a deduction for casualty or theft losses. In 2006, the latest available year, only 206,287 returns claimed such a deduction out of almost 50 million returns that itemized deductions.

Use of the casualty and theft loss deduction can fluctuate widely from year to year. Deductions have risen substantially for years witnessing a major

natural disaster — such as a hurricane, flood, or earthquake. In some years the increase in the total deduction claimed is due to a jump in the number of returns claiming the deduction. In others it reflects a large increase in the average dollar amount of deduction per return claiming the loss deduction.

Selected Bibliography

Fulcher, Bill. "Casualty Losses Can Be Deductible," *National Public Accountant*, v. 44 (July 1999), pp. 46-47.

Internal Revenue Service. *Casualties, Disasters, and Thefts*. Publication 547, for use in preparing 2007 returns.

Kahn, Jeffrey H. "Personal Deductions: A Tax 'Ideal' or Just Another 'Deal'?," *Law Review of Michigan State University*, v. 2002, Spring 2002, pp. 1-55.

Kaplow, Louis. "The Income Tax as Insurance: The Casualty Loss and Medical Expense Loss Deductions and the Exclusion of Medical Insurance Premiums," *California Law Review*, v. 79. December 1991, pp. 1485-1510.

— . "Income Tax Deductions for Losses as Insurance," *American Economic Review*, v. 82, no. 4. September 1992, pp. 1013-1017.

Milam, Edward E. and Donald H. Jones, Jr. "Casualty and Theft Losses Can Provide Significant Tax Deductions," *Taxes, The Tax Magazine*, v. 80, no. 10, October 2002, pp. 45-50.

Ritter, Gregory J. and Joel S. Berman. "Casualty Losses (A Tax Perspective)," *Florida Bar Journal*, v. 67 (April 1993), pp. 43-38.

Thompson, Steven C. and Nell Adkins. "Casualty Gains — An Oxymoron, or Just a Trap for Unwary Taxpayers?," *Taxes*, v. 73. June 1995, pp. 318-24.

U.S. Congress, Senate Finance Committee, *Detailed Summary of Energy, Disaster Relief, AMT, and Other Tax Extender Provisions in Emergency Economic Stabilization Act of 2008,* October 1, 2008, reported by BNA,Inc, TaxCore - Congressional Documents, October 2, 2008.

NET EXCLUSION OF PENSION CONTRIBUTIONS AND EARNINGS PLANS FOR EMPLOYEES AND SELF-EMPLOYED INDIVIDUALS (KEOGHS)

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	103.3	-	103.3
2009	107.8	-	107.8
2010	124.7	-	124.7
2011	138.5	-	138.5
2012	151.4	-	151.4

Authorization

Sections 401-407, 410-418E, and 457.

Description

Employer contributions to qualified pension, profit-sharing, stock-bonus, and annuity plans on behalf of an employee are not taxable to the employee. The employer is allowed a current deduction for these contributions (within limits). Earnings on these contributions are not taxed until distributed.

The employee or the employee's beneficiary is generally taxed on benefits when benefits are distributed. (In some cases, employees make direct contributions to plans that are taxed to them as wages; these previously taxed contributions are not subject to tax when paid as benefits).

A pension, profit-sharing, or stock-bonus plan is a qualified plan only if it is established by an employer for the exclusive benefit of employees or their beneficiaries. In addition, a plan must meet certain requirements, including standards relating to nondiscrimination, vesting, requirements for participation, and survivor benefits. Nondiscrimination rules are designed

to prevent the plans from primarily benefitting highly paid, key employees. Vesting refers to the period of employment necessary to obtain non-forfeitable pension rights.

Tax-favored pension plans, referred to as Keogh plans, are also allowed for the self-employed; they account for only a relatively small portion of the cost ($9.7, $9.8, $13.9, $18.1, and $19.9 billion in 2008-2012).

There are two major types of pension plans: defined-benefit plans, where employees are ensured of a certain benefit on retirement, and defined-contribution plans, where employees have a right to accumulated contributions (and earnings on those contributions).

The tax expenditure is measured as the tax revenue that the government does not currently collect on contributions and earnings amounts, offset by the taxes paid on pensions by those who are currently receiving retirement benefits.

Impact

Pension plan treatment allows an up-front tax benefit by not including contributions in wage income. In addition, earnings on invested contributions are not taxed, although tax is paid on both original contributions and earnings when amounts are paid as benefits. The net effect of these provisions, assuming a constant tax rate, is effectively tax exemption on the return. (That is, the rate of return on the after-tax contributions is equal to the pre-tax rate of return). If tax rates are lower during retirement years than during the years of contribution and accumulation, there is a "negative" tax. (In present value terms, the government loses more than it receives in taxes).

The employees who benefit from this provision consist of taxpayers whose employment is covered by a plan and whose service has been sufficiently continuous for them to qualify for benefits in a company or union-administered plan. The benefit derived from the provision by a particular employee depends upon the level of tax that would have been paid by the employee if the provision were not in effect.

Analysis of the March 2008 Current Population Survey shows that pension income constituted less than 7 percent of total family income for elderly individuals in the poorest two income quintiles (the poorest 40 percent of elderly individuals). Pension income, however, accounted for about 20 percent of total family income for those in the richest two income quintiles.

There are several reasons that the tax benefit accrues disproportionately to higher-income individuals. First, employees with lower salaries are less

likely to be covered by an employer plan. In 2007, only 15 percent of working prime-aged (25 to 54 years of age) individuals earning less than $20,000 were covered by a pension plan. In contrast, almost three-quarters of working prime-aged individuals earnings over $65,000 were covered by a pension plan.

Although some of these differences reflect the correlation between low income and age, the differences in coverage by income level hold across age groups. For example, in the 45 to 49 age group, only 16 percent with wage income less than $20,000 were covered, 46 percent with income $20,000 to $35,000 were covered, 62 percent with income $35,000 to $50,000 were covered, 70 percent with income $50,000 to $65,000, and 75 percent with income over $65,000 were covered.

Second, in addition to fewer lower-income individuals being covered by the plans, the dollar contributions are much larger for higher-income individuals. This disparity occurs not only because of their higher salaries, but also because of the integration of many plans with social security. Under a plan that is integrated with social security, employer-derived social security benefits or contributions are taken into account as if they were provided under the plan in testing whether the plan discriminates in favor of employees who are officers, shareholders, or highly compensated. These integration rules allow a smaller fraction of income to be allocated to pension benefits for lower-wage employees.

Finally, higher-income individuals derive a larger benefit from tax benefits because their tax rates are higher and thus the value of tax reductions are greater.

In addition to differences across incomes, workers are more likely to be covered by pension plans if they work in certain industries, if they are employed by large firms, or if they are unionized.

Rationale

The first income tax law did not address the tax treatment of pensions, but Treasury Decision 2090 in 1914 ruled that pensions paid to employees were deductible to employers. Subsequent regulations also allowed pension contributions to be deductible to employers, with income assigned to various entities (employers, pension trusts, and employees). Earnings were also taxable. The earnings of stock-bonus or profit-sharing plans were exempted in 1921 and the treatment was extended to pension trusts in 1926.

Like many early provisions, the rationale for these early decisions was not clear, since there was no recorded debate. It seems likely that the exemptions may have been adopted in part to deal with technical problems

of assigning income. In 1928, deductions for contributions to reserves were allowed.

In 1938, because of concerns about tax abuse (firms making contributions in profitable years and withdrawing them in loss years), restrictions were placed on withdrawals unless all liabilities were paid.

In a major development, in 1942 the first anti-discrimination rules were enacted, although these rules allowed integration with social security. These regulations were designed to prevent the benefits of tax deferral from being concentrated among highly compensated employees. Rules to prevent over-funding (which could allow pension trusts to be used to shelter income) were adopted as well.

Non-tax legislation in the Taft-Hartley Act of 1947 affected collectively bargained multi-employer plans and the Welfare and Pensions Plans Disclosure Act of 1958 added various reporting, disclosure, and other requirements.

In 1962, the Self-Employed Individuals Retirement Act allowed self-employed individuals to establish tax-qualified pension plans, known as Keogh (or H.R. 10) plans, which also benefitted from deferral.

Another milestone in the pension area was the Employee Retirement Income Security Act of 1974, which provided minimum standards for participation, vesting, funding, and plan asset management, along with creating the Pension Benefit Guaranty Corporation (PBGC) to provide insurance of benefits. Limits were established on the amount of benefits paid or contributions made to the plan, with both dollar limits and percentage-of-pay limits.

A variety of changes have occurred since this last major revision. In 1978, simplified employee pensions (SEPS) and tax-deferred savings (401(k)) plans were allowed. The limits on SEPS and 401(k)'s were raised in 1981. In 1982, limits on pensions were cut back and made the same for all employer plans, and special rules were established for "top-heavy" plans. The 1982 legislation also eliminated disparities in treatment between corporate and noncorporate (*i.e.*, Keogh) plans, and introduced further restrictions on vesting and coverage.

The Deficit Reduction Act of 1984 maintained lower limits on contributions, and the Retirement Equity Act of that same year revised rules regarding spousal benefits, participation age, and treatment of breaks in service.

In 1986, a variety of changes were enacted, including substantial reductions in the maximum contributions under defined-contribution plans, and a variety of other changes (anti-discrimination rules, vesting, integration

rules). In 1987, rules to limit under-funding and over-funding of pensions were adopted. The Small Business Job Protection Act of 1996 made a number of changes to increase access to plans for small firms, including safe-harbor nondiscrimination rules. In 1997, taxes on excess distributions and accumulations were eliminated.

The 2001 tax cut raised the contribution and benefit limits for pension plans, allowed additional contributions for those over 50, increased the full-funding limit for defined benefit plans, allowed additional ability to roll over limits on 401(k) and similar plans, and provided a variety of other regulatory changes. These provisions were to sunset at the end of 2010, but were made permanent by the Pension Protection Act of 2006.

The Economic Growth and Tax Relief Reconciliation Act of 2001 created the Roth 401(k), which went into effect on January 1, 2006. Contributions to Roth 401(k)s are taxed, but qualified distributions are not taxed.

Assessment

To tax defined-benefit plans can be very difficult since it is not always easy to allocate pension accruals to specific employees. It might be particularly difficult to allocate accruals to individuals who are not vested. This complexity would not, however, preclude taxation of trust earnings at some specified rate.

The major economic justification for the favorable tax treatment of pension plans is that they are argued to increase savings and increase retirement security. The effects of these plans on savings and overall retirement income are, however, subject to some uncertainty.

One incentive to save relies on an individual's realizing tax benefits on savings about which he can make a decision. Since individuals cannot directly control their contributions to plans in many cases (defined-benefit plans), or are subject to a ceiling, the tax incentives to save may not be very powerful, because tax benefits relate to savings that would have taken place in any case. At the same time, pension plans may force saving and retirement income on employees who otherwise would have total savings less than their pension-plan savings. The empirical evidence is mixed, and it is not clear to what extent forced savings is desirable.

There has been some criticism of tax benefits to pension plans, because they are only available to individuals covered by employer plans. Thus they violate the principle of horizontal equity (equal treatment of equals). They have also been criticized for disproportionately benefitting high-income individuals.

The Enron collapse focused attention on another important issue in pension plans: the displacement of defined benefit plans by defined contribution plans (particularly those with voluntary participation, such as the 401(k) plan, which are not insured) and the instances in which defined contribution plans were heavily invested in employer securities, increasing the risk to the employee who could lose retirement savings (as well as a job) when his firm failed. Research has suggested that individuals do not diversify their portfolios in the way that investment advisors would suggest, that they actually increase the share of their own contributions invested in employer stock when the employer stock is also used to make matching contributions, and that they are strongly affected by default choices in the level and allocation of investment.

Selected Bibliography

Cagan, Philip. *The Effect of Pension Plans on Aggregate Savings*. New York: Columbia University Press, 1965.

Choi, James J., David Laibson, and Brigitte C. Madrian, "Plan Design and 401(k) Savings Outcomes,"*National Tax Journal,* v. 57, June 2004, pp. 275-298.

Engen, Eric M., William G. Gale and John Karl Scholz. "The Effects of Tax-Based Saving Incentives on Saving and Wealth," *National Bureau of Economic Research Working Paper* 5759. September 1996.

— . "Personal Retirement Saving Programs and Asset Accumulation: Reconciling the Evidence," *National Bureau of Economic Research Working Paper* 5599. May 1996.

— . "The Illusory Effects of Savings Incentives on Saving," *Journal of Economic Perspectives*, v. 10, Fall 1996, pp. 113-138.

Even, William E. and David Macpherson. "Company Stock in Pension Plans," *National Tax Journal,* v. 57, June 2004, pp. 299-314.

Fox, John O. "The Troubling Shortfalls and Excesses of Tax Subsidized Pension Plans," ch. 11, *If Americans Really Understood the Income Tax,* Boulder Colorado, Westview Press, 2001.

Friedberg, Leora. and Michael T. Owyang, "Not Your Father's Pension Plan: The Rise of 401(k) and Other Defined Contribution Plans." *Federal Reserve Bank of St. Louis Review*, v. 84, January-February, 2002, pp. 23-34.

Gale, William G., J. Mark Iwry, and Gordon McDonald. "An Analysis of the Roth 401(k)." *Tax Notes*, January 9, 2006, pp. 163-167.

Gale, William G. "The Effects of Pensions on Household Wealth: A Re-Evaluation of Theory and Evidence," *Journal of Political Economy*, v. 106, August 1998, pp. 706-723.

Gravelle, Jane G. *Economic Effects of Taxing Capital Income*, ch. 8. Cambridge, MA: MIT Press, 1994.

— . *Employer Stock in Pension Plans: Economic and Tax Issues*, Library of Congress, Congressional Research Service Report RL31551, September 4, 2002.

— . "The Enron Debate: Lessons for Tax Policy," Urban-Brookings Tax Policy Center Discussion Paper 6, Washington, DC: The Urban Institute, February 2003.

Howard, Christopher. *The Hidden Welfare State: Tax Expenditure and Social Policy in the United States*. Princeton, NJ: Princeton Univ. Press, 1997.

Hubbard, R. Glenn. "Do IRAs and Keoghs Increase Savings?" *National Tax Journal*, v. 37. March 1984, pp. 43-54.

— , and Jonathan S. Skinner. "Assessing the Effectiveness of Savings Incentives." *Journal of Economic Perspectives*, v. 10 (Fall 1996), pp. 73-90.

Hungerford, Thomas L. *Saving Incentives: What May Work, What May Not*. Library of Congress, Congressional Research Service Report RL33482, Washington, DC: September 27, 2007.

— . "Tax Expenditures: Good, Bad, or Ugly?" *Tax Notes*, v. 113, no. 4, October 23, 2006, pp. 325-334.

Ippolito, Richard. "How Recent Tax Legislation Has Affected Pension Plans," *National Tax Journal*, v. 44. September 1991, pp. 405-417.

Johnson, Richard W. and Cori E. Uccello, "Cash Balance Plans: What Do They Mean for Retirement Security?"*National Tax Journal,* v. 57, June 2004, pp. 315-328.

Joulfaian, David and David Richardson. "Who Takes Advantage of Tax-Deferred Saving Programs? Evidence from Federal Income Tax Data." *National Tax Journal*, v. 54, September 2001, pp. 669-688.

Katona, George. *Private Pensions and Individual Savings*, Survey Research Center, Institute for Social Research, University of Michigan, 1965.

Lindeman, David, and Larry Ozanne. *Tax Policy for Pensions and Other Retirement Savings*. U.S. Congress, Congressional Budget Office. Washington, DC: U.S. Government Printing Office, April 1987.

Madrian, Brigette C. and Dennis F. Shea. " The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics*, v. 116, November 2001, pp. 1149-1187.

Mitchell, Olivia S., Stephen P. Utkus, and Tongxuan Yang. "Turning Workers into Savers? Incentives, Liquidity, and Choice in 401(k) Plan Design," *National Tax Journal*, v. 60, no. 3, September 2007, pp. 469-489.

Munnell, Alicia. "Are Pensions Worth the Cost?" *National Tax Journal*, v. 44, September 1991, pp. 406-417.

— . "Current Taxation of Qualified Plans: Has the Time Come?" *New England Economic Review*. March-April 1992, pp. 12-25.

— . "The Impact of Public and Private Pension Schemes on Saving and Capital Formation," *Conjugating Public and Private: The Case of Pensions*. Geneva: International Social Security Association, Studies and Research No. 24, 1987.

— . "Private Pensions and Saving: New Evidence," *Journal of Political Economy*, v. 84. October 1976, pp. 1013-1032.

Munnell, Alicia H. and Annika Sunden. *Coming Up Short: The Challenge of 401(k) Plans*. Washington, DC: Brookings Institution Press, 2004.

Pence, Karen. "Nature or Nurture: Why do 401(k) Participants Save Differently than Other Workers?" *National Tax Journal*, v. 55, September 2002, pp. 596-616.

— . "Reducing Bias in Estimates of the Effect of the 401(K) Program on Savings," in *Proceedings of the 94th Annual Conference 2001*, Washington DC, National Tax Association, 2002, pp. 130-135.

Poterba, James M., Steven F. Venti and David Wise. "Do 401(K) Contributions Crowd Out Other Personal Saving?" *Journal of Public Economics*, v. 58. 1995, pp. 1-32.

— . "How Retirement Saving Programs Increase Savings," *Journal of Economic Perspectives*, v. 10, Fall 1996, pp. 91-112.

— . "Targeted Retirement Saving and the Net Worth of Elderly Americans," *American Economic Review*, v. 84, May 1995, pp 180-185.

Purcell, Patrick. *Pension Reform: The Economic Growth and Tax Relief Reconciliation Act of 2001*. Library of Congress, Congressional Research Service Report RS20629, Washington, DC.: Updated June 18, 2002.

— . *Pension Sponsorship and Participation: Summary of Recent Trends*. Library of Congress, Congressional Research Service Report RL30122, Washington, DC.: Updated September 8, 2008.

Turner, John A. "Pension Tax Treatment," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

U.S. Congress, House Committee on Ways and Means. *Background Material: 2004 Green Book*, Committee Print, 108th Congress, 2nd session. March, 2004, pp. 13-3 to 13-15.

U.S. Department of Labor, Pension and Welfare Benefits Administration, *Trends in Pensions*. Washington, DC: U.S. Government Printing Office, 1989.

U.S. Department of Treasury. *Report to Congress on the Effect of the Full Funding Limit on Pension Benefit Security*. Department of the Treasury, May 1991.

U.S. General Accounting Office. *Answers to Key Questions About Private Pensions*. Washington, DC: U.S. Government Printing Office, GAO-02-7455P, September 18, 2002.

— . *Effects of Changing the Tax Treatment of Fringe Benefits*. Washington, DC: U.S. Government Printing Office, April 1992.

— . *Private Pensions: Improving Worker Coverage and Benefits*. Washington, DC: U.S. Government Printing Office, GAO-2-225. April 16, 2002.

— . *Private Pensions: Key Issues to Consider Following the Enron Collapse*. Testimony of David Walker, Washington, DC: U.S. Government Printing Office, GAO-02-480T, February 27, 2002.

Utgoff, Kathleen. "Public Policy and Pension Regulation," *National Tax Journal*, v. 44, September 1991, pp. 383-391.

NET EXCLUSION OF PENSION CONTRIBUTIONS AND EARNINGS: INDIVIDUAL RETIREMENT PLANS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	16.3	-	16.3
2009	18.7	-	18.7
2010	20.8	-	20.8
2011	20.4	-	20.4
2012	22.2	-	22.2

Authorization

Sections 219 and 408.

Description

There are two types of individual retirement accounts (IRAs): the traditional IRA and the Roth IRA. The traditional IRA allows for the tax deferred accumulation of investment earnings, and some individuals are eligible to make tax-deductible contributions to their traditional IRAs while others are not. Some or all distributions from traditional IRAs are taxed at retirement. In contrast, contributions to Roth IRAs are not tax deductible, but distributions from Roth IRAs are not taxed on withdrawal in retirement.

The deduction for contributions is phased out for active participants in a pension plan. Individuals not covered by a pension plan and whose spouse is also not covered can deduct the full amount of their IRA contribution. The deduction for IRA contributions is phased out for pension plan participants. For 2009, the phase-out range for single taxpayers is $55,000 to $65,000 in modified adjusted gross income and $89,000 to $109,000 for joint returns. Individuals may choose a backloaded IRA (a Roth IRA) where contributions are not deductible but no tax applies to withdrawals. These benefits are

phased out at $166,000 to $176,000 for a joint return and $105,000 to $120,000 for singles.

The annual limit for IRA contributions is the lesser of $5,000 or 100 percent of compensation. The ceiling is indexed for inflation in $500 increments. Individuals age 50 and older may make an additional catch-up contribution of $1,000.

A married taxpayer who is eligible to set up an IRA is permitted to make deductible contributions up to $5,000 to an IRA for the benefit of the spouse.

Distributions made before age 59 ½ (other than those attributable to disability or death) are subject to an additional 10-percent income tax unless they are rolled over to another IRA or to an employer plan. Exceptions include withdrawals of up to $10,000 used to purchase a first home, education expenses, or for unreimbursed medical expenses.

Distributions must begin after age 70 ½. Contributions may, however, still be made to a Roth IRA after that age.

The tax expenditure estimates reflect the net of tax losses due to failure to tax contributions and current earnings in excess of taxes paid on withdrawals.

Under legislation adopted at the end of 2006 (the Tax Relief and Heath Care Act of 2006, P.L. 109-432), amounts may be withdrawn, on a one-time basis, from IRAs and contributed to Health Savings Accounts (HSAs) without tax or penalty.

Impact

Deductible IRAs allow an up-front tax benefit by deducting contributions along with no taxing of earnings, although tax is paid when earnings are withdrawn. The net overall effect of these provisions, assuming a constant tax rate, is the equivalent of tax exemption on the return (as in the case of Roth IRAs). (That is, the individual earns the pre-tax rate of return on his after-tax contribution). If tax rates are lower during retirement years than they were during the years of contribution and accumulation, there is a "negative" tax on the return. Non-deductible IRAs benefit from a postponement of tax rather than an effective forgiveness of taxes, as long as they incur some tax on withdrawal.

IRAs tend to be less focused on higher-income levels than some types of capital tax subsidies, in part because they are capped at a dollar amount. Their benefits do tend, nevertheless, to accrue more heavily to the upper half of the income distribution. This effect occurs in part because of the low

participation rates at lower income levels. Further, the lower marginal tax rates at lower income levels make the tax benefits less valuable.

The current tax expenditure reflects the net effect from three types of revenue losses and gains. The first is the forgone taxes from the deduction of IRA contributions by certain taxpayers. The distribution table below shows that almost half of this tax benefit goes to low- and middle-income taxpayers with adjusted gross income below $75,000. (The median tax return in 2004 had adjusted gross income of about $25,000.)

The second is the forgone taxes from not taxing IRA earnings. The distribution table shows that about a quarter of these tax benefits accrue to low- and middle-income taxpayers. The primary reason is upper income taxpayers have larger IRA balances and the higher marginal tax rate makes this tax benefit more valuable to upper income taxpayers.

The final type is the tax revenue gain from the taxation of IRA distributions. Distributions from traditional IRAs are taxed. If the contributions were deductible, then the entire distribution is taxed. Only the investment earnings are taxed for distributions from nondeductible traditional IRAs. Qualified distributions from Roth IRAs are not taxed. The distribution table shows that low- and middle-income taxpayers account for about one third of the tax revenue gain.

The total tax benefit of IRAs are the combination of these three effects. The final column of the distribution table reports the net tax benefit by income class. The table shows that less than 25 percent of the net tax benefit accrues to low- and middle-income taxpayers with income below $75,000.

Estimated Percentage Distribution of IRA Benefits

Income Class	Deductions	Earnings	Distributions	Net Effect
less than $10,000	1.1	1.2	1.1	1.4
$10,000-30,000	8.5	5.8	7.2	4.5
$30,000-50,000	20.2	8.6	10.2	7.9
$50,000-75,000	17.8	11.4	14.0	9.1
$75,000-100,000	17.0	15.9	18.6	13.0
$100,000-200,000	23.4	25.6	27.5	23.4
Over $200,000	12.1	31.6	21.4	40.8

Note: Derived from 2004 IRS, Statistics of Income data.

Rationale

The provision for IRAs was enacted in 1974, but it was limited to individuals not covered by pension plans. The purpose of IRAs was to reduce discrimination against these individuals.

In 1976, the benefits of IRAs were extended to a limited degree to the nonworking spouse of an eligible employee. It was thought to be unfair that the nonworking spouse of an employee eligible for an IRA did not have access to a tax-favored retirement program.

In 1981, the deduction limits for all IRAs were increased to the lesser of $2,000 or 100 percent of compensation ($2,250 for spousal IRAs). The 1981 legislation extended the IRA program to employees who are active participants in tax-favored employer plans, and permitted an IRA deduction for qualified voluntary employee contributions to an employer plan.

The current rules limiting IRA deductions for higher-income individuals not covered by pension plans were phased out at $40,000 to $50,000 ($25,000 to $35,000 for singles) as part of the Tax Reform Act of 1986. Part of the reason for this restriction arose from the requirements for revenue and distributional neutrality. The broadening of the base at higher income levels through restrictions on IRA deductions offset the tax rate reductions. The Taxpayer Relief Act of 1997 increased phase-outs and added Roth IRAs to encourage savings.

The 2001 tax cut act raised the IRA contribution limit to $3,000, with an eventual increase to $5,000 and inflation indexing. These provisions were to sunset at the end of 2010, but were made permanent by the Pension Protection Act of 2006. The 2001 tax act also added the tax credit and catch up contributions. The elimination of the income limit on Roth IRA conversions starting in 2010 was added by the Tax Increase Prevention and Reconciliation Act of 2005.

Assessment

The tendency of capital income tax relief to benefit higher-income individuals has been reduced in the case of IRAs by the dollar ceiling on the contribution, and by the phase-out of the deductible IRAs as income rises for those not covered by a pension plan. Providing IRA benefits to those not covered by pensions may also be justified as a way of providing more equity between those covered and not covered by an employer plan.

Another economic justification for IRAs is that they are argued to increase savings and increase retirement security. The effects of these plans on savings and overall retirement income are, however, subject to some uncertainty, and this issue has been the subject of a considerable literature.

Selected Bibliography

Attanasio, Orazio and Thomas De Leire. "The Effect of Individual Retirement Accounts on Household Consumption and Savings," *Economic Journal*, v. 112, July 2002, pp. 504-538.

Burman, Leonard, Joseph J. Cordes, and Larry Ozanne. "IRAs and National Savings," *National Tax Journal*, v. 43. September 1990, pp. 123-128.

Burman, Leonard, William G. Gale, and David Weiner, "The Taxation of Retirement Saving: Choosing Between Front-Loaded and Back-Loaded Options." *National Tax Journal*, v. 54, September 2001, pp. 689-702.

Burnham, Paul and Larry Ozanne. "Individual Retirement Accounts," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

Engen, Eric M., William G. Gale and John Karl Scholz. "The Illusory Effects of Saving Incentives on Saving," *Journal of Economic Perspectives*, v. 10, Fall 1996, pp. 113-138.

— . "Personal Retirement Saving Programs and Asset Accumulation: Reconciling the Evidence," *National Bureau of Economic Research Working Paper* 5599. May 1996.

Feenberg, Daniel, and Jonathan Skinner. "Sources of IRA Savings," *Tax Policy and the Economy 1989*, ed. Lawrence H. Summers. Cambridge, Mass.: M.I.T. Press, 1989, pp. 25-46.

Gale, William G., and John Karl Scholz. "IRAs and Household Savings," *American Economic Review*, v. 84, no. 5, December 1994, pp. 1233-1260.

Gravelle, Jane G. "Do Individual Retirement Accounts Increase Savings?" *Journal of Economic Perspectives*, v. 5, Spring 1991, pp. 133-148.

— . *Economic Effects of Taxing Capital Income*, ch. 8. Cambridge, MA: MIT Press, 1994.

Gravelle, Jane G. and Maxim Shvedov, *Proposed Savings Accounts: Economic and Budgetary Effects*, Library of Congress, Congressional Research Service Report RL32228. Updated March 7, 2007.

Hubbard, R. Glenn and Jonathan S. Skinner. "Assessing the Effectiveness of Savings Incentives," *Journal of Economic Perspectives*, v. 10, Fall 1996, pp. 73-90.

Hungerford, Thomas L. and Jane G. Gravelle. *Individual Retirement Accounts (IRAs): Issues and Proposed Expansion*, Library of Congress, Congressional Research Service Report RL30255. Updated March 10, 2008.

Imrohoroglu, Selahattn and Douglas Joins. "The Effect of Tax Favored Retirement Accounts on Capital Accumulation," *American Economic Review*, v. 88 (September 1988), pp. 749-768.

Joulfaian, David and David Richardson. "Who Takes Advantage of Tax-Deferred Saving Programs? Evidence from Federal Income Tax Data." *National Tax Journal,* v. 54, September 2001, pp. 669-688.

Kotlikoff, Laurence J. "The Crisis in U.S. Saving and Proposals to Address the Crisis," *National Tax Journal*, v. 43, September 1990, pp. 233-246.

Poterba, James, Steven Venti, and David A. Wise. "How Retirement Savings Programs Increase Saving," *Journal of Economic Perspectives*, v. 10, Fall 1996, pp. 91-112.

Purcell, Patrick. "Pension Reform: The Economic Growth and Tax Relief Reconciliation Act of 2001," Library of Congress, Congressional Research Service Report RS20629, Washington, DC.: Updated January 28, 2003.

Stevens, Kevin T., and Raymond Shaffer. "Expanding the Deduction for IRAs and Progressivity," *Tax Notes*. August 24, 1992, pp. 1081-1085.

Venti, Steven F., and David A. Wise. "Have IRAs Increased U.S. Savings?" *Quarterly Journal of Economics*, v. 105, August 1990, pp. 661-698.

U.S. Congress, Congressional Budget Office. *Tax Policy for Pensions and Other Retirement Savings*, by David Lindeman and Larry Ozanne. Washington, DC: U.S. Government Printing Office, April 1987.

— , House Committee on Ways and Means. *Background Materials: 2000 Green Book, Committee Print, 106th Congress, 2nd session. October 6, 2000, pp. 789-792.*

— , Joint Committee on Taxation. *Present Law, Proposals, and Issues Relating to Individual Retirement Arrangements and Other Savings Incentives*, Joint Committee Print, 101st Congress, 2nd session. March 26, 1990.

— . *General Explanation of the Tax Legislation Enacted in 1997*, Joint Committee Print, 105th Congress, 1st Session, December 17, 1997.

— . *Description and Analysis of S. 612 (Savings and Investment Incentive Act of 1991)*, Joint Committee Print.

— . Senate Committee on Finance. *Hearing on Bentson-Roth IRA*, 102nd Congress, 1st session. May 16, 1991.

TAX CREDIT FOR CERTAIN INDIVIDUALS FOR ELECTIVE DEFERRALS AND IRA CONTRIBUTIONS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.8	-	0.8
2009	0.8	-	0.8
2010	0.8	-	0.8
2011	0.8	-	0.8
2012	0.8	-	0.8

Authorization

Section 25B.

Description

Taxpayers who are 18 or over and not full time students or dependents can claim a tax credit for elective contributions to qualified retirement plans or IRAs. The maximum contribution amount eligible for the credit is $2,000. Credit rates depend on filing status and adjusted gross income. For joint returns the credit is 50% for adjusted gross income under $31,000, 20% for incomes between $31,000 and $34,000, and 10% for incomes above $34,000 and less than $52,000. Income categories are half as large for singles ($15,500, $17,000, and $26,000) and between those for singles and joint returns for heads of household ($23,250, $25,500, and $39,000). The income thresholds are indexed to inflation. The credit may be taken in addition to general deductions or exclusions.

Impact

Because of the phaseout, the credit's benefits are targeted to lower income individuals. However, the ability to use the credit is limited because so many lower income individuals have no tax liability. According to the Treasury Department, about 57 million taxpayers would be eligible for the credit, but about 26 million would receive no credit because they have no tax liability. Of those actually able to benefit from the credit, the amount of benefit will probably be relatively small. The average credit for the 2006 tax year was less than $175. One study finds that the credit has a modest effect on take-up and on amounts contributed to retirement savings plans by low and moderate income families.

Historically, most lower income individuals do not tend to save or participate in voluntary plans such as individual retirement accounts, perhaps because of pressing current needs. Thus, the number of families and individuals claiming the credit may be relatively small. In tax year 2006, about 6% of taxpayers with adjusted gross income of $50,000 or less took the retirement savings contribution credit.

Rationale

This provision was enacted as part of the Economic Growth and Tax Relief Reconciliation Act of 2001 and was set to expire after 2006. The Pension Protection Act of 2006 made this credit permanent. Its purpose was to provide savings incentives for lower income individuals who historically have had inadequate retirement savings or none at all. The credit is comparable to a matching contribution received by many 401(k) participants from their employers.

Assessment

The expectation is that the credit would have limited impact on increasing savings for its target group because so many lower income individuals will not have enough tax liability to benefit from the credit. Among those who are eligible, the higher incomes necessary for them to have tax liability mean that the credit rate will be lower. The credit could be redesigned to cover more lower income individuals by stacking it first, before the refundable child credit, or making the credit refundable. Gale, Iwry, and Orszag (2005) estimate that the annual revenue cost of a refundable retirement savings contribution credit would be about $4.2 billion between 2007 and 2015.

As with other savings incentives, there is no clear evidence that these incentives are effective in increasing savings. The credit also has a cliff effect: because the credit is not phased down slowly, a small increase in

income can trigger a shift in the percentage credit rate and raise taxes significantly.

Selected Bibliography

Brady, Peter and Warren B. Hrung. *Assessing the Effectiveness of the Saver's Credit: Preliminary Evidence from the First Year*. Paper presented at the National Tax Association Meetings, Miami, Fl. November 2005.

Duflo, Ester, et al., "Saving Incentives for Low- and Middle-Income Families: Evidence from a Field Experiment with H&R Block," *Quarterly Journal of Economics*, v. 121, no. 4, November 2006, pp. 1311-1346.

Gale, William G., J. Mark Iwry, and Peter R. Orszag, "The Saver's Credit: Expanding Retirement Savings for Middle- and Lower-Income Americans," The Retirement Security Project, No. 2005-2. March 2005.

Hungerford, Thomas L. *Savings Incentives: What May Work, What May Not*, Library of Congress, Congressional Research Service Report RL33482, Washington, DC: Updated September 27, 2007.

Kiefer, Donald, et al., "The Economic Growth and Tax Relief Reconciliation Act of 2001: Overview and Assessment of Effects on Taxpayers." *National Tax Journal*, v. 55, March 2002, pp. 89-118.

Koenig, Gary and Robert Harvey. "Utilization of the Saver's Credit: An Analysis of the First Year," *National Tax Journal*, v. 58, no. 4, December 2005, pp. 787-806.

Orszag, Peter. "The Retirement Savings Component of Last Year's Tax Bill: Why it is Premature to Make Them Permanent." Center on Budget Policies and Priorities. September 18, 2003.

White, Craig G. "Does the Saver's Credit Offer an Incentive to Lower Income Families?" *Tax Notes*, v. 96, September 16, 2002, pp. 1633-1640.

Sullivan, Martin. "Economic Analysis: With Little Fanfare, Gephardt Introduces Sweeping Pension Reform." *Tax Notes*, v. 95, June 17, 2002, pp. 1709-1710.

EXCLUSION OF OTHER EMPLOYEE BENEFITS: PREMIUMS ON GROUP TERM LIFE INSURANCE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.6	-	2.6
2009	2.7	-	2.7
2010	2.7	-	2.7
2011	2.7	-	2.7
2012	2.7	-	2.7

Authorization

Section 79 and L.O. 1014, 2 C.B. 8 (1920).

Description

The cost of employer-provided group-term life insurance plans that satisfy "anti-discrimination" provisions, net of employee contributions, above a $50,000 threshold is excluded from employees' gross income. The cost of group-term life insurance imputed for an individual employee is usually calculated by multiplying the amount of insurance (in thousands of dollars) by an age-group-specific monthly unit cost factor taken a from U.S. Treasury table (published in Treasury Regulations, Subchapter A, Sec. 1.79-3). For example, suppose a 37-year-old employee receives $150,000 in group-term life insurance coverage for a full year from his employer and pays no premiums himself. The coverage eligible for the exclusion ($100,000) is then multiplied by the unit cost factor for employees aged 35-39 ($.09/month per $1000 of coverage) taken from the Treasury table, giving an imputed monthly cost of $9 and an annual imputed cost of $108. Thus, the term life insurance coverage of this employee would be considered as increasing his taxable income by $108, even if the cost of obtaining comparable term life insurance coverage were higher.

The group-term life insurance exclusion is subject to "anti-discrimination" provisions intended to ensure that benefits are spread widely and equitably among employees. Plans may fail to meet those provisions if only a narrow subset of employees receives benefits or if it discriminates in favor of "key employees" or if "key employees" comprise the bulk of the beneficiaries. Officers of a firm, five-percent owners, one-percent owners earning more than $150,000, or top 10 employee-owners are generally deemed key employees. If a group-term life insurance plan fails to satisfy "anti-discrimination" provisions, the plan's actual cost, rather than the cost given by the Treasury-provided table, is added to the key employee's taxable income.

Impact

Employer-provided group-term life insurance plans are a form of employee compensation. Because the full value of the insurance coverage is not taxed, a firm can provide this compensation at lower cost than the gross amount of taxable wages sufficient to allow an employee to purchase the same amount of insurance. Group term life insurance is a significant portion of total life insurance. The value of this fringe benefit is fully exempt from income tax because the value of the term insurance coverage and any life insurance proceeds paid if the employee dies are both excluded from gross taxable income.

Self-employed individuals or those who work for an employer without such a plan derive no advantage from this tax subsidy for life insurance coverage. The Bureau of Labor Statistics National Compensation Survey found that higher-wage employees and employees working for large firms and for governments are more likely to receive life insurance benefits from their employer.

Rationale

This exclusion was originally allowed, without limitation of coverage, by administrative legal opinion (L.O. 1014, 2 C.B. 8 (1920)). The reason for the ruling is unclear, but it may have related to supposed difficulties in valuing the insurance to individual employees, since the value is closely related to age and other mortality factors. Some later studies suggested valuation for such insurance products was not a major problem.

The $50,000 limit on the amount subject to exclusion was enacted in 1964. Reports accompanying that legislation reasoned that the exclusion would encourage the purchase of group life insurance and assist in keeping the family unit intact upon death of the breadwinner.

The further limitation on the exclusion available for key employees in discriminatory plans was enacted in 1982, and expanded in 1984 to apply to post-retirement life insurance coverage. In 1986, more restrictive rules regarding anti-discrimination were adopted, but were repealed in 1989 as part of debt limit legislation (P.L. 101-140).

The President's Advisory Panel on Federal Tax Reform, which issued its final report in November 2005, recommended elimination of the group-term life insurance exemption on equity grounds. The Advisory Panel argued that providing this tax benefit to a small number of employees requires higher tax rates on others. Congress has adopted no legislation that would implement recommendations of the Advisory Panel.

In January 2007, Representative Michael Burgess introduced H.R.377, which would amend the Internal Revenue Code of 1986 to increase the dollar limitation on employer-provided group term life insurance that can be excluded from the gross income of the employee. This bill was referred to the Committee on Ways and Means. No further action has been taken.

Assessment

Encouraging individuals to purchase more life insurance may be justified by concerns that many individuals would fail to buy prudent amounts of life insurance on their own, which could expose surviving family members to financial vulnerabilities. Subsidizing life insurance coverage may help provide a minimum standard of living for surviving dependent individuals.

The form of this exclusion may raise horizontal and vertical equity issues. Aside from administrative convenience, the rationale for providing insurance subsidies to employees, but not to the self-employed or those who are not employed is not obvious. As with many other fringe benefits, higher-income individuals probably receive more benefits from this exclusion because their marginal tax rates are higher and because they are more likely to receive group life insurance benefits from their employers. Lower-income individuals, whose surviving dependents are probably more financially vulnerable, probably benefit less from this exclusion.

This exclusion may motivate employers and employees to design compensation packages that increase term life insurance coverage of workers. Whether this exclusion is the most efficient method of encouraging purchases of prudent levels of life insurance coverage is unclear.

Selected Bibliography

Butler, Richard J. *The Economics of Social Insurance and Employee Benefits*. Berlin: Springer, 1999.

Hacker, Jacob S. *The Divided Welfare State: The Battle over Public and Private Social Benefits in the United States*. New York: Cambridge, 2002.

Internal Revenue Service. *Employer's Tax Guide to Fringe Benefits For Benefits Provided in 2006*. Publication 15-B, revised December 2005.

International Fiscal Association, *The Taxation of Employee Fringe Benefits: A Report Based on the Proceedings of a Seminar Held in Florence, Italy, in 1993*, IFA Congress Seminar Series, No 18b. Dordrecht, The Netherlands: Kluwer, September 1995.

Sunley, Emil. "Employee Benefits and Transfer Payments," *Comprehensive Income Taxation*, ed. Joseph A. Pechman. Washington, DC: The Brookings Institution, 1977, pp. 75-106.

Turner, Robert W. "Fringe Benefits," in *The Encyclopedia of Taxation and Tax Policy (2nd ed.)*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005, pp.159-162.

President's Advisory Panel on Federal Tax Reform. *Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System: Report of the President's Advisory Panel on Federal Tax Reform*. Washington, DC: November 2005, p. 85.

U.S. General Accounting Office. *Effects of Changing the Tax Treatment of Fringe Benefits*. Washington, DC: U.S. Government Printing Office, April 1992.

U.S. Department of Labor, Bureau of Labor Statistics, "Employee Benefits in the United States, March 2008," Press release USDL: 08-1122, August 7, 2008.

U.S. Treasury, Tax Decision 8821 (Group-Term Insurance; Uniform Premiums), May 25, 1999, available at:
[http://www.irs.gov/pub/irs-regs/td8821.pdf].

— . Regulations, Subchapter A, Sec. 1.79-3, "Determination of Amount Equal to Cost of Group-Term Life Insurance."

EXCLUSION OF OTHER EMPLOYEE BENEFITS: PREMIUMS ON ACCIDENT AND DISABILITY INSURANCE

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	2.9	-	2.9
2009	3.0	-	3.0
2010	3.1	-	3.1
2011	3.3	-	3.3
2012	3.5	-	3.5

Authorization

Sections 105 and 106.

Description

Premiums paid by employers for employee accident and disability insurance plans are excluded from the gross taxable income of employees. Although benefits paid to employees are generally taxable, payments that relate to permanent injuries are excluded from taxable income so long as those payments are computed without regard to the amount of time an employee is absent from work.

Impact

As with term life insurance, the employer's cost is less than he would have to pay in wages that are taxable, to confer the same benefit on the employee because the value of this insurance coverage is not taxed. Employers thus are encouraged to buy such insurance for employees. Because some proceeds from accident and disability insurance plans, as well as the premiums paid by the employer, are excluded from gross income, the value of the fringe benefit is generally exempted from federal income tax.

The Bureau of Labor Statistics National Compensation Survey found that higher-wage employees and employees working for large firms and for governments are more likely to receive insurance benefits from their employer. As with many other fringe benefits, higher-income individuals also receive more benefits from this exclusion because their marginal tax rates are higher.

Rationale

Early 20th century tax laws excluded payments connected to injuries or sickness from taxable income if received from accident or health insurance or from workers' compensation plans. In 1939, Congress added an exclusion for sick pay. In 1943, the IRS held that employer payments to employees connected to injury or sickness, even if administered as a well-defined plan, were not exempt from employee's income, while accident and health benefits paid as insurance policy proceeds (according to the IRS definition of 'insurance') were exempted from gross income. In 1954, Congress modified the exemption of accident and health benefits in an attempt to equalize the tax treatment of benefits through an insurance plan and benefits provided in other ways.

Encouraging individuals to purchase more accident or disability insurance may be justified by concerns that many individuals would fail to buy prudent amounts of insurance on their own, which could increase financial vulnerabilities of workers and their family members.

Assessment

Since public programs (social security and workman's compensation) provide a minimum level of disability payments, the justification for providing a subsidy for additional benefits is unclear. The rules that determine who qualifies for accident and disability insurance benefits, however, can be very different for public and private plans.

The form of the exclusion may raise questions of horizontal and vertical equity. As with many other fringe benefits, higher-income individuals probably receive more benefits from this exclusion because their marginal tax rates are higher and because they are more likely to receive insurance benefits from their employers. Lower-income individuals, who may have more difficulty protecting themselves from income losses due to accident or disability, probably benefit less from this exclusion.

This exclusion may motivate employers and employees to design compensation packages that increase accident and disability insurance

coverage of workers. Whether this exclusion is the most efficient method of encouraging purchases of prudent levels of insurance coverage is unclear.

Selected Bibliography

Butler, Richard J. *The Economics of Social Insurance and Employee Benefits*. Berlin: Springer, 1999.

Hacker, Jacob S. *The Divided Welfare State: The Battle over Public and Private Social Benefits in the United States*. New York: Cambridge, 2002.

Hargesheimer, Philip K., "What is a Plan under Internal Revenue Code Section 105(d)?" *Ohio State Law Journal*, vol.28, 1967, pp. 483-501.

International Fiscal Association, *The Taxation of Employee Fringe Benefits: A Report Based on the Proceedings of a Seminar Held in Florence, Italy, in 1993*, IFA Congress Seminar Series, No 18b. Dordrecht, The Netherlands: Kluwer, September 1995.

Simon, Karla W. "Fringe Benefits and Tax Reform Historical Blunders and a Proposal for Structural Change," *University of Florida Law Review*, vol. 36, 1984, pp. 889-895.

"Taxation of Employee Accident and Health Plans Before and Under the 1954 Code," *Yale Law Journal*, vol. 64, no. 2. December 1954, pp. 222-247.

Turner, Robert W. "Fringe Benefits," in *The Encyclopedia of Taxation and Tax Policy (2nd ed.)*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005, pp. 159-162.

U.S. Congress, House Committee on Ways and Means, "An Appraisal of Individual Income Tax Exclusions" (Roy Wentz), *Tax Revision Compendium*. Committee Print, 1959, pp. 329-40.

U.S. Congress, Senate Committee on Finance, "Internal Revenue Code of 1954," Report no. 1622, June 18, 1954, pp. 15-16.

U.S. Internal Revenue Service, *General Counsel Memorandum 23511*, 1943 *Cumulative Bulletin* 86.

U.S. Department of Labor, Bureau of Labor Statistics, "Employee Benefits in the United States, March 2008," Press release USDL: 08-1122, August 7, 2008.

U.S. General Accounting Office. *Effects of Changing the Tax Treatment of Fringe Benefits*. Washington, DC: U.S. Government Printing Office, April 1992.

PHASE OUT OF THE PERSONAL EXEMPTION AND DISALLOWANCE OF THE PERSONAL EXEMPTION AND THE STANDARD DEDUCTION AGAINST THE AMT

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	-11.1	-	-11.1
2009	-35.7	-	-35.7
2010	-64.5	-	-64.5
2011	-54.8	-	-54.8
2012	-44.2	-	-44.2

Authorization

Sections 151(d) and 55(d).

Description

The deduction for personal and dependency exemptions are phased out for higher income taxpayers. The total exemption amount is reduced by 2 percent for each $2,500 ($1,250 for married persons filing separately) of adjusted gross income (AGI) above the threshold amount. The 2009 threshold amounts are $250,200 for joint filers, $208,500 for heads of household, $166,800 for single filers, and $125,100 for married persons filing separately. The personal exemption phase-out is being phased out and will be fully eliminated for tax years beginning after 2009 (the elimination, however, expires in 2010).

The alternative minimum tax (AMT) standard deduction (or exemption amount) is phased out for taxpayers with high AMT income (AMTI). In 2008, the exemption amount was $69,950 for joint filers and $46,200 for individuals. For the 2009 tax year and beyond, the exemption amount drops

to $45,000 for joint filers and $33,750 for single filers. Under the phase-out, these exemption amounts are reduced by $0.25 for every $1of AMTI over $150,000 for joint filers and $112,500 for single filers. Thus, taxpayers filing jointly with AMTI at or over $429,000 ($297,300 for single filers) in 2008 will not have an AMT standard deduction.

Personal exemptions ($3,500 per exemption under the regular tax in 2008) are not allowed against AMTI.

Impact

These provisions are designed to increase taxes on higher income taxpayers. Almost 99 percent of the burden of these provisions falls on taxpayers with income above $100,000.

Distribution of Burden by Income Class at 2007 Rates and Income Levels

[In millions of dollars]

Income Class	Total
Below $10,000	0.0%
$10,000 to $20,000	0.0%
$20,000 to $30,000	0.0%
$30,000 to $40,000	0.0%
$40,000 to $50,000	0.0%
$50,000 to $75,000	0.2%
$75,000 to $100,000	0.7%
$100,000 to $200,000	9.1%
$200,000 and over	89.9%

Note: Total may not sum to 100% due to rounding.

Rationale

The Tax Reform Act of 1986 (P.L. 99-514) created a tax structure with two marginal tax rates (15 percent and 28 percent) and a 5 percent surcharge on the taxable income of certain high-income taxpayers. The surcharge was phased out as income increased and consequently created a tax rate "bubble" of 33 percent for some taxpayers. The surcharge was essentially created to phase out the tax benefits of the 15 percent tax rate and personal exemptions for high-income taxpayers. The Omnibus Budget Reconciliation Act of

1990 (OBRA90, P.L. 101-508) repealed the 5 percent surcharge and instituted the current explicit approach for phasing out the tax benefits of the personal exemption. The Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-15) contained provisions to gradually repeal the personal exemption phaseout.

The Emergency Economic Stabilization Act of 2008 (P.L. 110-343) increased the AMT exemption amount to $69,950 for joint filers and $46,200 for individuals for the 2008 tax year, but did not change the AMTI levels that begin the phase-out of the exemption. The increased exemption amounts are intended to keep the same number of taxpayers on the AMT from year to year as the exemption amounts are not indexed for inflation. Increasing the exemption amount also raises the income level where the phase-out of the exemption is complete. The increased exemption amounts and accompanying expansion of the phase-out dampens the effect of the AMT on higher income taxpayers.

Assessment

The personal exemption phaseout rules were set to expire in 1995 under OBRA90. But budgetary pressures led to tax increases in 1993, which included making the personal exemption phaseout permanent. By 2001, Congress cited three reasons for eliminating the personal exemption phaseout. First, the personal exemption phaseout is too complex. Second, the phaseout is essentially a hidden marginal tax rate increase on higher-income taxpayers. Lastly, the phaseout imposes excessively high marginal tax rates on families.

The AMT provisions, the phaseout of the AMT standard deduction and disallowance of personal exemptions against AMTI, raise the minimum tax and increases the marginal tax rate disproportionately on high income families. The AMT generally and the phaseout of the standard deduction specifically also increases the complexity and administrative cost of the personal income tax.

Selected Bibliography

Esenwein, Gregg A. *The PEP and Pease Provisions of the Federal Individual Income Tax*, Library of Congress, Congressional Research Service Report RS22464, Washington, DC: June 2006.

Maguire, Steven. *The Alternative Minimum Tax for Individuals*, Library of Congress, Congressional Research Service Report RL30149, Washington, DC: June 2008.

Steuerle, Eugene. "Fixing the AMT by Raising Tax Rates," *Tax Notes*, April 9, 2007, pp. 171-172.

EXCLUSION OF SURVIVOR ANNUITIES PAID TO FAMILIES OF PUBLIC SAFETY OFFICERS KILLED IN THE LINE OF DUTY

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	([1])	-	([1])
2009	([1])	-	([1])
2010	([1])	-	([1])
2011	([1])	-	([1])
2012	([1])	-	([1])

([1]) Positive tax expenditure of less than $50 million.

Authorization

Section 101(h).

Description

The surviving spouse of a public safety office killed in the line of duty can exclude from gross income a survivor annuity payment under a governmental pension plan. The annuity must be attributable to the officer's service as a public safety officer.

Impact

The exclusion is available to all surviving spouses who qualify regardless of income level.

Rationale

Congress believed that surviving spouses of public safety officers killed in the line of duty should be subject to the same rules as survivors of military service personnel killed in combat. This provision was part of the Taxpayer Relief Act of 1997 (P.L. 105-34).

Assessment

Surviving spouses of public safety officers killed in the line of duty are now treated comparably to surviving spouses of military service personnel killed in combat. The annual revenue loss from this item has been less than $50 million since its enactment in 1997.

EXCLUSION OF UNTAXED SOCIAL SECURITY AND RAILROAD RETIREMENT BENEFITS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	24.2	-	24.2
2009	25.7	-	25.7
2010	27.8	-	27.8
2011	34.1	-	34.1
2012	35.3	-	35.3

Authorization

Sec. 86 I.R.C. 1954 and I.T. 3194, 1938-1 C.B. 114 and I.T. 3229, 1938-2136, as superseded by Rev. Ruling 69-43, 1969-1 C.B. 310; I.T. 3447, 1941-1 C.B. 191, as superseded by Rev. Ruling 70-217, 1970-1 C.B. 12.

Description

In general, the Social Security and Railroad Retirement benefits of most recipients are not subject to tax. A portion of Social Security and certain (Tier I) Railroad Retirement benefits is included in income for taxpayers whose "provisional income" exceeds certain thresholds.

Tier I Railroad Retirement benefits are those provided by the Railroad Retirement System that are equivalent to the Social Security benefit that would be received by the railroad worker were he or she covered by Social Security. "Provisional income" is adjusted gross income plus one-half the Social Security benefit and otherwise tax-exempt "interest" income (i.e., interest from tax-exempt bonds).

The thresholds below which no Social Security or Tier I Railroad Retirement benefits are taxable are $25,000 (single), and $32,000 (married couple filing a joint return).

If provisional income is between the $25,000 threshold ($32,000 for a married couple) and a second-level threshold of $34,000 ($44,000 for a married couple), the amount of benefits subject to tax is the lesser of: (1) 50 percent of benefits; or (2) 50 percent of provisional income in excess of the first threshold.

If provisional income is above the second threshold, the amount of benefits subject to tax is the lesser of:
(1) 85 percent of benefits or
(2) 85 percent of income above the second threshold, plus
the smaller of (a) $4,500 ($6,000 for a married couple) or,
(b) 50 percent of benefits.

For a married person filing separately who has lived with his or her spouse at any time during the tax year, taxable benefits are the lesser of 85 percent of benefits or 85 percent of provisional income.

The tax treatment of Social Security and Tier I Railroad Retirement benefits differs from that of pension benefits. For pension benefits, all benefits that exceed (or are not attributable to) the amount of the employee's contribution are fully taxable.

The proceeds from taxation of Social Security and Tier I Railroad Retirement benefits at the 50 percent rate are credited to the Social Security Trust Fund and the National Railroad Retirement Investment Trust, respectively. Proceeds from taxation of Social Security benefits and Tier I Railroad Retirement benefits at the 85 percent rate are credited to the Hospital Insurance Trust Fund (for Medicare).

Impact

The Congressional Budget Office estimates that about 61 percent of Social Security and Tier I Railroad Retirement recipients pay no tax on their benefits. The distribution of the tax expenditure is shown below.

Distribution by Income Class of Tax Expenditure, Untaxed Social Security and Railroad Retirement Benefits, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	11.1
$20 to $30	21.2
$30 to $40	18.5
$40 to $50	16.6
$50 to $75	23.7
$75 to $100	4.3
$100 to $200	3.2
$200 and over	1.3

Rationale

Until 1984, Social Security benefits were exempt from the federal income tax. The original exclusion arose from rulings made in 1938 and 1941 by the then Bureau of Internal Revenue (I.T. 3194, I.T. 3447). The exclusion of benefits paid under the Railroad Retirement System was enacted in the Railroad Retirement Act of 1935.

For years many program analysts questioned the basis for the rulings on Social Security and advocated that the treatment of Social Security benefits for tax purposes be the same as it is for other pension income. Pension benefits are now fully taxable except for the proportion of projected lifetime benefits attributable to the worker's contributions. Financial pressures on the Social Security program in the early 1980s also increased interest in taxing benefits. The 1981 National Commission on Social Security Reform proposed taxing one-half of Social Security benefits received by persons whose income exceeded certain amounts and crediting the proceeds to the Social Security Trust Fund. The inclusion of one-half of benefits represented the employer contribution to the benefits.

In enacting the 1983 Social Security Amendments (P.L. 98-21) in March 1983, Congress essentially adopted the Commission's recommendation, but modified it to phase in the tax on benefits gradually, as income rose above threshold amounts. At the same time, it modified the tax treatment of Tier I Railroad Retirement benefits to conform to the treatment of Social Security benefits.

In his FY 1994 budget, President Clinton proposed that the taxable proportion of Social Security and Tier I Railroad Retirement benefits be increased to 85 percent effective in 1994, with the proceeds credited to Medicare's Hospital Insurance (HI) Trust Fund. At that time is was estimated that the highest paid category of worker would, during the worker's lifetime, contribute fifteen percent of the value of the Social Security benefits received by the worker. That is, at least eighty-five percent of the Social Security benefits received by a retiree could not be attributed to contributions by the retiree. Congress approved this proposal as part of the Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66), but limited it to recipients whose threshold incomes exceed $34,000 (single) or $44,000 (couple). This introduced the current two levels of taxation.

Assessment

Principles of horizontal equity (equal treatment of those in equal circumstances) generally support the idea of treating Social Security and Tier I Railroad Retirement benefits similarly to other sources of retirement income. Horizontal equity suggests that equal income, regardless of source, represents equal ability to pay taxes, and therefore should be equally taxed. Just as the portion of other pension benefits and IRA distributions on which taxes have never been paid is fully taxable, so too should the portion of Social Security and Tier I Railroad Retirement benefits not attributable to the individual's contributions be fully taxed.

In 1993, it was estimated that if Social Security benefits received the same tax treatment as pensions, on average about 95 percent of benefits would be included in taxable income, and that the lowest proportion of benefits that would be taxable for anyone entering the work force that year would be 85 percent of benefits. Because of the administrative complexities involved in calculating the proportion of each individual's benefits, and because in theory it would ensure that no one would receive less of an exclusion than entitled to under other pension plans, a maximum of 85 percent of Social Security benefits is currently in taxable income.

To the extent that Social Security benefits reflect social welfare payments, it can be argued that benefits be taxed similar to other general untaxed social welfare payments and not like other retirement benefits. One exception to the concept of horizontal equity is social welfare payments — payments made for the greater good (social welfare). Not all Social Security payments have a pension or other retirement income component and, unlike other pensions, more than one person may be entitled to benefits for a single worker. In addition, Social Security benefits are based on work earnings history and not contributions, with the formula providing additional benefits to recipients with lower work earnings histories.

Because the calculation of provisional income (to determine if benefits are taxable) includes a portion of Social Security benefits and certain otherwise untaxed income, the provisional income calculation can be compared to the income resources concept often used for means testing of various social benefits. Because the taxation increases as the provisional income increases, the after-tax Social Security benefits will decline as provisional income increases (but not below 15% of pre-tax benefits). This has resulted in the taxation of benefits being viewed as a "back-door" means test.

Under the current two level structure, all Social Security beneficiaries have some untaxed benefits. Taxes are imposed on at least half of the benefits for middle and upper income beneficiaries, while lower income beneficiaries have no benefits taxed.

Selected Bibliography

Brannon, Gerard M. "The Strange Precision in the Taxation of Social Security Benefits," *Tax Notes*. March 29, 1993.

Fellows, James A., and Haney, J. Edison. "Taxing the Middle Class," *Taxes*. October, 1993.

Mulvey, Janemarie and Christine Scott, *Social Security Benefits: Calculation and History of Taxing Benefits*, Library of Congress, Congressional Research Report RL32552. Washington, DC., 2008.

U.S. Congress, Congressional Budget Office. *Reducing the Deficit: Spending and Revenue Options.* March, 1994.

— , Committee on Ways and Means, 2008 Green Book, Background Material and Data on the Programs Within the Jurisdiction of the Committee on Ways and Means, available on the Committee website.

— , House of Representatives. *Omnibus Budget Reconciliation Act of 1993,* Conference Report No. 103-213. August 4, 1993.

Weiner, David. "Social Security Benefits, Federal Taxation," in *The Encyclopedia of Taxation and Tax Policy*, eds. Joseph J. Cordes, Robert O. Ebel, and Jane G. Gravelle. Washington, DC: Urban Institute Press, 2005.

EXCLUSION OF INTEREST ON STATE AND LOCAL GOVERNMENT BONDS FOR VETERANS' HOUSING

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	0.1	([1])	0.1
2009	0.1	([1])	0.1
2010	0.1	([1])	0.1
2011	0.1	([1])	0.1
2012	0.1	([1])	0.1

([1])Less than $50 million.

Authorization

Sections 103, 141, 143, and 146 of the Internal Revenue Code of 1986.

Description

Veterans' housing bonds are used to provide mortgages at below-market interest rates on owner-occupied principal residences of homebuyers who are veterans. These veterans' housing bonds are classified as private-activity bonds rather than governmental bonds because a substantial portion of their benefits accrues to individuals rather than to the general public.

Each State with an approved program is subject to an annual volume cap related to its average veterans' housing bond volume between 1979 and 1985. For further discussion of the distinction between governmental bonds and private-activity bonds, see the entry under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Impact

Since interest on the bonds is tax exempt, purchasers are willing to accept lower before-tax rates of interest than on taxable securities. These low interest rates enable issuers to offer mortgages on veterans' owner-occupied housing at reduced mortgage interest rates.

Some of the benefits of the tax exemption also flow to bondholders. For a discussion of the factors that determine the shares of benefits going to bondholders and homeowners, and estimates of the distribution of tax-exempt interest income by income class, see the "Impact" discussion under *General Purpose Public Assistance: Exclusion of Interest on Public Purpose State and Local Debt*.

Rationale

Veterans' housing bonds were first issued by the States after World War II, when both State and Federal governments enacted programs to provide benefits to veterans as a reward for their service to the Nation.

The Omnibus Budget Reconciliation Act of 1980 required that veterans' housing bonds must be general obligations of the State. The Deficit Reduction Act of 1984 restricted the issuance of these bonds to the five States - Alaska, California, Oregon, Texas, and Wisconsin - that had qualified programs in existence before June 22, 1984, and limited issuance to each State's average issuance between 1979 and 1984.

Loans were restricted to veterans who served in active duty any time before 1977 and whose application for the mortgage financing occurred before the later of 30 years after leaving the service or January 31, 1985, thereby imposing an effective sunset date for the year 2007. Loans were also restricted to principal residences.

The Tax Increase Prevention and Reconciliation Act required that payors of State and municipal bond tax-exempt interest begin to report those payments to the Internal Revenue Service after December 31, 2005. The manner of reporting is similar to reporting requirements for interest paid on taxable obligations.

The most recent changes to the program were enacted by the Heroes Earnings Assistance and Relief Tax Act of 2008, P.L. 110-245, which increased the annual issue limits to $100 million for Alaska, Oregon, and Wisconsin. In the case of California and Texas, the Act removed a provision restricting eligibility to veterans that served before 1977. Additionally, the exception for veterans from the first-time homebuyer requirement was made permanent.

Assessment

The need for these bonds has been questioned, because veterans are eligible for numerous other housing subsidies that encourage home ownership and reduce the cost of their housing. As one of many categories of tax-exempt private-activity bonds, veterans' housing bonds have been criticized because they increase the financing costs of bonds issued for public capital stock and increase the supply of assets available to individuals and corporations to shelter their income from taxation.

Selected Bibliography

Cooperstein, Richard L. "Economic Policy Analysis of Mortgage Revenue Bonds." In *Mortgage Revenue Bonds: Housing Markets, Home Buyers and Public Policy*, edited by Danny W. Durning, Boston, MA: Kluwer Academic Publishers, 1992.

—. "The Economics of Mortgage Revenue Bonds: A Still Small Voice." In *Mortgage Revenue Bonds: Housing Markets, Home Buyers and Public Policy*, edited by Danny W. Durning, Boston, MA: Kluwer Academic Publishers, 1992.

Maguire, Steven. *Private Activity Bonds: An Introduction.* Library of Congress, Congressional Research Service Report RL31457. March 27, 2008.

—. *Tax-Exempt Bonds: A Description of State and Local Government Debt*. Library of Congress, Congressional Research Service Report RL30638. March 26, 2008.

U.S. Congress, Joint Committee on Taxation. *General Explanation of the Revenue Provisions of the Deficit Reduction Act of 1984*, Committee Print, 98th Congress, 2nd session. December 31, 1984, pp. 903-958.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

EXCLUSION OF VETERANS' BENEFITS AND SERVICES

(1) Exclusion of Veterans' Disability Compensation
(2) Exclusion of Veterans' Pensions
(3) Exclusion of Readjustment Benefits

Estimated Revenue Loss

[in billions of dollars]

Individuals				
Fiscal Year	Veterans Disability Compensation	Veterans Pensions	Readjustment Benefits	Total
2008	3.6	0.1	0.4	4.1
2009	3.7	0.1	0.5	4.3
2010	3.8	0.1	0.8	4.7
2011	4.1	0.1	1.0	5.2
2012	4.2	0.1	1.2	5.5

Authorization

38 U.S.C. Section 5301.

Description

All benefits administered by the Department of Veterans Affairs (VA) are exempt from taxation. Such benefits include those for veterans' disability compensation, veterans' pension payments, and readjustment benefit payments.

Veterans' service — connected disability compensation payments result from the veteran having a service-related wound, injury, or disease. Typically, benefits increase with the severity of disability. Veterans whose

service-connected disabilities are rated at 30 percent or more are entitled to additional allowances for dependents. Veterans with a single disability rated 60 percent or more, or two or more disabilities with a combined rating of 70 percent or more may receive compensation at the 100-percent level if they are deemed unemployable by the VA.

Dependency and indemnity compensation payments are made to surviving spouses and qualified parents of: servicemembers who die on active duty; veterans who die due to a service-connected illness or condition; and veterans who are totally disabled for ten or more years before their death due to a non-service-connected illness or condition (the ten year requirement is reduced to 5 years if the veteran leaves military service totally disabled, and is 1 year for prisoners of war).

Veteran pensions are available to support veterans with a limited income who had at least one day of military service during a war period and at least 90 days of active duty service, or discharged due to a service-connected disability. Benefits are paid to veterans over age 65 or to totally disabled veterans with disabilities unrelated to their military service.

Pension benefits are based on "countable" income (the larger the income, the smaller the pension) with no payments made to veterans whose assets may be used to provide adequate maintenance. For veterans coming on the rolls after December 31, 1978, countable income includes earnings of the veteran, spouse, and dependent children, if any. Veterans who were on the rolls prior to that date may elect coverage under prior law, which excludes from countable income the income of a spouse, among other items.

Readjustment benefits for veterans include cash payments for education or training; vocational rehabilitation training or support payments; grants for adapting automobiles, homes, or equipment; and a clothing allowance for certain disabled veterans.

Health care for veterans is included in the tax expenditure for exclusion of medical care and TRICARE medical insurance for military dependents, retiree, and retiree dependents not enrolled in Medicare.

Impact

Beneficiaries of these major veterans' programs pay less tax than other taxpayers with the same or smaller economic incomes. Since these exclusions are not counted as part of income, the tax savings are a percentage of the amount excluded, depending on the marginal tax bracket of the veteran. Thus, the exclusion amounts will have greater value for veterans with higher incomes than for those with lower incomes.

Rationale

The rationale for excluding veterans' benefits from taxation is not clear. The tax exclusion of benefits was adopted in 1917, during World War I. Many have concluded that the exclusion is in recognition of the extraordinary sacrifices made by armed forces personnel, especially during periods of war.

Assessment

The exclusion of veterans' benefits alters the distribution of payments and favors higher-income individuals. The rating schedule for veterans disability compensation was intended to reflect the average impact of the disability on the average worker. However, because the rating is not directly rated to the impact of disability on the veteran's actual or potential earnings, the tax exempt status of disability compensation payments may reflect a tax exemption for an inaccurate estimate of the veteran's lost earnings because of the disability. Some view veterans' compensation as a career indemnity payment owed to those disabled to any degree while serving in the nation's armed forces. If benefits were to become taxable, higher benefit levels would be required if lost income were to be replaced. Some disabled veterans would find it difficult to increase working hours to make up for the loss of expected compensation payments. Some commentators have noted that if veterans with new disability ratings below 30 percent were to be made ineligible for compensation it would concentrate spending on those veterans most impaired. However, in FY2006, while 62.9 percent of veterans receiving disability compensation had a combined rating of 30 percent or less, their disability compensation payments were only 21.3 percent of all disability compensation payments in FY2006.

Selected Bibliography

Cullinane, Danielle. *Compensation for Work-Related Injury and Illness.* Santa Monica, CA, RAND, 1992. 60 p. (RAND Publication Series N-3343-FMP).

Ferris, Nancy. "Serving Those Who Served," *Government Executive*, v. 30 (January 1998), pp. 18, 20, 22, 24.

Ogloblin, Peter K. *Military Compensation Background Papers: Compensation Elements and Related Manpower Cost Items, Their Purposes and Legislative Backgrounds*. Washington, DC: Department of Defense, Office of the Secretary of Defense, U.S. Government Printing Office, November 1991, pp. 633-645.

Poulson, Linda L. and Ananth Seetharaman. "Taxes and the Armed Forces," *The CPA Journal*, April 1996, pp. 22-26.

U.S. Congress, Congressional Budget Office. *Disability Compensation: Current Issues and Options for Change.* Washington, DC: U.S. Government Printing Office, 1982.

— . *Budget Options.* "Narrow the eligibility for Veterans' Disability Compensation to Veterans Whose Disabilities are Related to Their Military Duties," Washington, DC: February 2007.

U.S. Congress, General Accounting Office. *VA Disability Compensation: Comparison of VA Benefits with Those of Workers' Compensation Programs; Report to the Chairman, Subcommittee on Benefits, Committee on Veterans' Affairs, House of Representatives*, GAO Report GAO/HEHS-97-5. Washington, DC: U.S. Government Printing Office. 1997.

— . *VA Disability Compensation: Disability Ratings May Not Reflect Veterans' Economic Losses; Report to the Chairman, Subcommittee on Compensation, Pension, Insurance and Memorial Affairs*, Committee on Veterans' Affairs, House of Representatives, GAO Report GAO/HEHS-97-9. Washington, DC: U.S. Government Printing Office. 1997.

U.S. Congress, House Committee on Ways and Means. *2008 Green Book; Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*, available on the Committee website.

Veterans' Disability Benefits Commission, *Honoring the Call to Duty: Veterans' Disability Benefits in the 21st Century*, October, 2007.

General Purpose Fiscal Assistance

EXCLUSION OF INTEREST ON PUBLIC PURPOSE STATE AND LOCAL GOVERNMENT DEBT

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	19.0	7.4	26.4
2009	19.7	7.7	27.4
2010	20.4	8.0	28.4
2011	23.2	8.4	31.6
2012	24.0	8.8	32.8

Authorization

Sections 103 and 141.

Description

Certain obligations of State and local governments qualify as "governmental" bonds. The interest income earned by individual and corporate purchasers of these bonds is excluded from taxable income. This interest income is not taxed because the bond proceeds generally are used to build capital facilities that are owned and operated by governmental entities and serve the general public interest, such as highways, schools, and government buildings. These bonds can be issued in unlimited amounts, although State governments do have self-imposed debt limits. The revenue loss estimates in the above table for general fiscal assistance are based on the difference between excluded interest income on these governmental bonds and taxable bonds.

Other obligations of State and local governments are classified as "private-activity" bonds. The interest income earned by individual and corporate purchasers of these bonds is included in taxable income. This interest income is taxed because the bond proceeds are believed to provide

substantial benefits to private businesses and individuals and the bonds are repaid with revenue generated by the project, e.g., tolls or service charges. Tax exemption is available for a subset of these otherwise taxable private-activity bonds if the proceeds are used to finance an activity included on a list of activities specified in the Code. Unlike governmental bonds, however, these tax-exempt, private-activity bonds may not be issued in unlimited amounts. All governmental entities within each State currently are subject to a federally imposed State volume cap on new issues of these tax-exempt, private-activity bonds equal to the greater of $85 per resident or $262.095 million in 2008. Some qualified private activities, such as qualified public educational facilities, are subject to national caps and are not subject to the State volume cap. Still other facilities, such as government owned airports, docks, and wharves, are not capped.

Each activity included in the list of private activities eligible for tax-exempt financing is discussed elsewhere in this document under the private activity's related budget function.

Impact

The distributional impact of this interest exclusion can be viewed from two perspectives: first, the division of tax benefits between State and local governments and bond purchasers; and second, the division of the tax benefits among income classes. The direct benefits of the exempt interest income flow both to State and local governments and to the purchasers of the bonds. The exclusion of interest income causes the interest rate on State and local government obligations to be lower than the rate paid on comparable taxable bonds. In effect, the Federal Government pays part of State and local interest costs. For example, if the market rate on tax-exempt bonds is 8.5 percent when the taxable rate is 10 percent, there is a 1.5-percentage-point interest rate subsidy to State and local governments.

The interest exclusion also raises the after-tax return for some bond purchasers. A taxpayer facing a 15 percent marginal tax rate is equally well off purchasing either the 8.5 percent tax-exempt bond or the 10-percent taxable bond (both yield an 8.5 percent after-tax interest rate). But a taxpayer facing a 35 percent marginal tax rate is better off buying a tax-exempt bond, because the after-tax return on the taxable bond is 6.5 percent, and on the tax-exempt bond, 8.5 percent. These "inframarginal" investors receive what have been characterized as windfall gains.

The allocation of benefits between the bondholders and State and local governments (and, implicitly, its taxpayer citizens) depends on the spread in interest rates between the tax-exempt and taxable bond market, the share of the tax-exempt bond volume purchased by individuals with marginal tax rates exceeding the market-clearing marginal tax rate, and the range of the marginal tax rate structure. The reduction of the top income tax rate of bond

purchasers from the 70 percent individual rate that prevailed prior to 1981 to the 35 percent individual rate that prevails in 2008 has increased the share of the tax benefits going to State and local governments.

The table below provides an estimate of the distribution by income class of tax-exempt interest income (including interest income from both governmental and private-activity bonds). In 2006, approximately 76.5 percent of individuals' tax-exempt interest income is earned by returns with adjusted gross income in excess of $100,000, although these returns represent only 11.7 percent of all returns. Returns below $30,000 earn only 6.1 percent of tax-exempt interest income, although they represent 48.7 percent of all returns.

Distribution of Tax-Exempt Interest Income, 2006

Income Class (in thousands of $)	Percentage Distribution
Below $10	2.6
$10 to $20	1.5
$20 to $30	2.0
$30 to $40	2.1
$40 to $50	2.5
$50 to $75	6.9
$75 to $100	5.9
$100 to $200	15.5
$200 to $500	17.3
$500 to $1,000	10.5
$1,000 to $1,500	5.2
$1,500 to $2,000	3.5
$2,000 to $5,000	9.1
$5,000 to $10,000	5.1
$10,000 and over	10.4

Source: IRS, Statistics of Income Division, July 2008

The revenue loss is even more concentrated in the higher income classes than the interest income because the average marginal tax rate (which determines the value of the tax benefit from the nontaxed interest income) is higher for higher-income classes.

Rationale

This exemption has been in the income tax laws since 1913, and was based on the belief that State and local interest income had constitutional protection from Federal Government taxation. The argument in support of this constitutional protection was rejected by the Supreme Court in 1988, *South Carolina v. Baker* (485 U.S. 505, [1988]). In spite of this loss of protection, many believe the exemption for governmental bonds is still justified on economic grounds, principally as a means of encouraging State and local governments to overcome a tendency to underinvest in public capital formation.

Bond issues whose debt service is supported by State and local tax bases have been left largely untouched by Federal legislation, with a few exceptions such as arbitrage restrictions, denial of Federal guarantee, and registration. The reason for this is that most of these bonds have been issued for the construction of public capital stock, such as schools, highways, sewer systems, and government buildings.

This has not been the case for revenue bonds without tax-base support and whose debt service is paid from revenue generated by the facilities built with the bond proceeds. These bonds were the subject of almost continual legislative scrutiny, beginning with the Revenue and Expenditure Control Act of 1968 and peaking with a comprehensive overhaul by the Tax Reform Act of 1986. This legislation focused on curbing issuance of the subset of tax-exempt revenue bonds used to finance the quasi-public investment activities of private businesses and individuals that are characterized as "private-activity" bonds. Each private activity eligible for tax exemption is discussed elsewhere in this document under the private activity's related budget function.

Assessment

This tax expenditure subsidizes the provision of State and local public services. A justification for a Federal subsidy is that it encourages State and local taxpayers to provide public services that also benefit residents of other States or localities. The form of the subsidy has been questioned because it subsidizes one factor of public sector production, capital, and encourages State and local taxpayers to substitute capital for labor in the public production process. Critics maintain there is no evidence that any underconsumption of State and local public services is isolated in capital facilities and argue that, to the extent a subsidy of State and local public service provision is needed to obtain the service levels desired by Federal taxpayers, the subsidy should not be restricted only to capital.

The efficiency of the subsidy, as measured by the Federal revenue loss that shows up as reduced State and local interest costs rather than as windfall

gains for purchasers of the bonds, has also been the subject of considerable controversy. The State and local share of the benefits (but not the amount) depends to a great extent on the number of bond purchasers with marginal tax rates higher than the marginal tax rate of the purchaser who clears the market. The share of the subsidy received by State and local governments was improved considerably during the 1980s as the highest statutory marginal income tax rate on individuals was reduced from 70 percent to 31 percent and on corporations from 46 percent to 34 percent. (The highest current rate on individuals and corporations is now 35 percent.)

The open-ended structure of the subsidy affects Federal control of its budget and the amount of the Federal revenue loss on governmental bonds is entirely dependent upon the decisions of State and local officials.

Selected Bibliography

Chalmers, John M. R. "Systematic Risk and the Muni Puzzle." *National Tax Journal,* vol. 59, no. 4, December 2006, pp. 833-848.

Fortune, Peter. "Tax-Exempt Bonds Really Do Subsidize Municipal Capital!" *National Tax Journal*, v. 51, March 1998, pp. 43-54.

— . "The Municipal Bond Market, Part II: Problems and Policies," *New England Economic Review*. May/June, 1992, pp. 47-64.

Galle, Brian D., and Ethan Yale. "Can Discriminatory State Taxation of Municipal Bonds be Justified?" *Tax Notes*, October 8, 2007, pp. 153-159.

Gordon, Roger H., and Gilbert E. Metcalf. "Do Tax-Exempt bonds Really Subsidize Municipal Capital?" *National Tax Journal*, v. 44, December 1991, pp. 71-79.

Gravelle, Jane G., and Jennifer Gravelle. "How Federal Policymakers Account for the Concerns of State and Local Governments in the Formulation of Federal Tax Policy," *National Tax Journal*, vol. LX, no. 3, September 2007, pp. 631-648.

Lunder, Erika. *Dormant Commerce Clause and State Treatment of Tax-Exempt Bonds*. Library of Congress, Congressional Research Service Report RS22803, February 2008.

Maguire, Steven. *Private Activity Bonds: An Introduction*. Library of Congress, Congressional Research Service Report RL31457, March 2008.

— . *Tax-Exempt Bonds: A Description of State and Local Government Debt.* Library of Congress, Congressional Research Service Report RL30638, March 2008.

Ott, David J., and Allan H. Meltzer. *Federal Tax Treatment of State and Local Securities*. Washington, DC: The Brookings Institution, 1963.

Poterba, James M. and Arturo Ramirez Verdugo. "Portfolio Substitution and the Revenue Cost of Exempting State and Local Government Interest Payments from Federal Income Tax," *National Bureau of Economic Research*, Working Paper 14439, October 2008.

Poterba, James M. and Andrew A. Samwick. "Taxation and Household Portfolio Composition: US Evidence from the 1980s and 1990s, *Journal of Public Economics*, v. 87, January 2003, pp. 5-38.

Temple, Judy. "Limitations on State and Local Government Borrowing for Private Purposes." *National Tax Journal*, v. 46, March 1993, pp. 41-53.

U.S. Congress, Congressional Budget Office. Statement of Donald B. Marron before the Subcommittee on Select Revenue Measures Committee on Ways and Means U.S. House of Representatives. "Economic Issues in the Use of Tax-Preferred Bond Financing," March 16, 2006.

U.S. Congress, Joint Committee on Taxation, *Present Law and Background Related to State and Local Government Bonds*, Joint Committee Print JCX-14-06, March 16, 2006.

U.S. Department of Treasury, Internal Revenue Service. *Tax-Exempt Private Activity Bonds*, Publication 4078, June 2004.

U.S. Government Accountability Office, *Information on Selected Capital Facilities Related to the Essential Governmental Function Test*, GAO-06-1082, September 2006.

Zimmerman, Dennis. *The Private Use of Tax-Exempt Bonds: Controlling Public Subsidy of Private Activity*. Washington, DC: The Urban Institute Press, 1991.

— . "Tax-Exempt Bonds," in *The Encyclopedia of Taxation and Tax Policy*, edited by Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle. Washington, DC: The Urban Institute Press, 2005.

DEDUCTION OF NONBUSINESS STATE AND LOCAL GOVERNMENT INCOME, SALES, AND PERSONAL PROPERTY TAXES

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	48.0	-	48.0
2009	37.0	-	37.0
2010	33.8	-	33.8
2011	57.0	-	57.0
2012	66.4	-	66.4

Authorization

Section 164.

Description

State and local income, sales, and personal property taxes paid by individuals are deductible from adjusted gross income. For the 2004 through 2009 tax years, however, taxpayers chose between deducting sales or income taxes. Business income, sales, and property taxes are deductible as business expenses, but their deduction is not a tax expenditure because deduction is necessary for the proper measurement of business economic income.

Impact

The deduction of State and local individual income, sales, and personal property taxes increases an individual's after-Federal-tax income and reduces the individual's after-Federal-tax price of the State and local public services

provided with these tax dollars. Some of the benefit goes to the State and local governments (because individuals are willing to pay higher taxes) and some goes to the individual taxpayer.

There may be an impact on the structure of State and local tax systems. Economists have theorized that if a particular State and local tax or revenue source is favored by deductibility in the federal tax code, then State and local governments may rely more upon that tax source. In effect, local governments and taxpayers recognize that residents are only paying part of the tax, and that the federal government, through federal deductibility, is paying the remainder.

The distribution of tax expenditures from State and local income, sales, and personal property tax deductions is concentrated in the higher income classes. Over 92% of the tax benefits were taken by families with adjusted gross income in excess of $75,000 in 2007. As with any deduction, it is worth more as marginal tax rates increase. Personal property tax deductions (typically for cars and boats) are but a small fraction of State and local taxes paid deduction.

Distribution by Income Class of Tax Expenditure for State and Local Income and Personal Property Tax Deductions, 2007

Income Class (in thousands of $)	Percentage Distribution
Below $10	0.0
$10 to $20	0.0
$20 to $30	0.2
$30 to $40	0.5
$40 to $50	1.1
$50 to $75	6.0
$75 to $100	7.8
$100 to $200	32.5
$200 and over	51.9

Rationale

Deductibility of State and local taxes was adopted in 1913 to avoid taxing income that was obligated to expenditures over which the taxpayer had little or no discretionary control. User charges (such as for sewer and water services) and special assessments (such as for sidewalk repairs), however, were not deductible. The Revenue Act of 1964 eliminated deductibility for motor vehicle operators' licenses, and the Revenue Act of 1978 eliminated deductibility of the excise tax on gasoline. These decisions represent

congressional concern that differences among States in the legal specification of taxes allowed differential deductibility treatment for taxes that were essentially the same in terms of their economic incidence.

The Tax Reform Act of 1986 eliminated deductibility of sales taxes, partly due to concern that these taxes were estimated and therefore did not perfectly represent reductions of taxable income, and partly due to concerns that some portion of the tax reflects discretionary decisions of State and local taxpayers to consume services through the public sector that might be consumed through private (nondeductible) purchase. The Omnibus Budget Reconciliation Act (OBRA) of 1990 curtailed the tax benefit from State and local income and real property tax deductions for higher income taxpayers (those whose AGI exceeds the applicable threshold amount — $159,950 for 2008). OBRA 1990 requires that itemized deductions be reduced by a percentage of the amount by which adjusted gross income exceeds the threshold amount. The phaseout is scheduled to gradually phase-out beginning in the 2006 tax year and be completely eliminated beginning with the 2010 tax year.

In 2004, sales tax deductibility was reinstated for the 2004 and 2005 tax years by the American Jobs Creation Act of 2004 (P.L. 108-357). In contrast to pre-1986 law, State sales and use taxes can only be deducted *in lieu of* State income taxes, not in addition to. Taxpayers who itemize and live in States without a personal income tax will benefit the most from this provision. The rationale behind the *in lieu of* is the more equal treatment for taxpayers in States that do not levy an income tax. In December 2006, P.L. 109-432 extended the deduction through 2007. In October 2008, P.L. 110-343 extended the sales tax deduction option for an additional two years, through 2009.

Assessment

Modern theories of the public sector discount the "don't tax a tax" justification for State and local tax deductibility, emphasizing instead that taxes represent citizens' decisions to consume goods and services collectively. In that sense, State and local taxes are benefit taxes and should be treated the same as expenditures for private consumption — not deductible against Federal taxable income.

Deductibility can also be seen as an integral part of the Federal system of intergovernmental assistance and policy. Modern theories of the public sector also suggest that:

(1) deductibility does provide indirect financial assistance for the State and local sector and should result in increased State and local budgets, and

(2) deductibility will influence the choice of State and local tax instruments if deductibility is not provided uniformly.

In theory, there is an incentive for sub-federal governments to rely upon the taxes that are deductible from federal income, such as personal property taxes, because the tax "price" to the taxpayer is lower than the "price" on taxes that are not deductible.

Selected Bibliography

Burman, Leonard E., Christopher Geisler, and Eric Toder. "How Big are Individual Income Tax Expenditures, and Who Benefits from Them?," *American Economic Review*, vol. 93, no. 2, May 2008, pp. 79-83.

Feldstein, Martin, and Gilbert Metcalf. "The Effect of Federal Tax Deductibility on State and Local Taxes and Spending," *Journal of Political Economy*. 1987, pp. 710-736.

Fox, William F., and John A. Swain. "The Federal Role in State Taxation: A Normative Approach," *National Tax Journal*, September 2007, pp. 611-630.

Gade, Mary and Lee C. Adkins. "Tax Exporting and State Revenue Structures," *National Tax Journal*. March 1990, pp. 39-52.

Holtz-Eakin, D. and H. Rosen. "Tax Deductibility and Municipal Budget Structure," *National Bureau of Economic Research*, Working Paper No. 2224, 1987.

— . "Federal Deductibility and Local Property Tax Rates," *Journal of Urban Economics*, v. 27, 1990, pp. 269-284.

Kenyon, Daphne. "Federal Income Tax Deductibility of State and Local Taxes: What Are Its Effects? Should It Be Modified or Eliminated?" *Strengthening the Federal Revenue System*. Advisory Commission on Intergovernmental Relations Report A-97. 1984, pp. 37-66.

Lindsey, Lawrence B. "Federal Deductibility of State and Local Taxes: A Test of Public Choice by Representative Government," in *Fiscal Federalism: Quantitative Studies*, edited by Harvey Rosen, (Chicago: University of Chicago Press), 1998, pp. 137-176.

Maguire, Steven . "Federal Deductibility of State and Local Taxes," Library of Congress, Congressional Research Service Report RL32781. September 2008.

Noto, Nonna A., and Dennis Zimmerman. "Limiting State-Local Tax Deductibility: Effects Among the States," *National Tax Journal*. December 1984, pp. 539-549.

— . *Limiting State-Local Tax Deductibility in Exchange for Increased General Revenue Sharing: An Analysis of the Economic Effects*. U.S. Congress, Subcommittee on Intergovernmental Relations, Committee on Governmental Affairs, 98th Congress, 1st session, Committee Print S. Prt 98-77. August 1983.

DEFERRAL OF INTEREST ON SAVINGS BONDS

Estimated Revenue Loss

[In billions of dollars]

Fiscal year	Individuals	Corporations	Total
2008	1.2	-	1.2
2009	1.2	-	1.2
2010	1.2	-	1.2
2011	1.3	-	1.3
2012	1.3	-	1.3

Authorization

Section 454(c) of the Internal Revenue Code of 1992.

Description

Owners of U.S. Treasury Series E, Series EE, and Series I savings bonds have the option of either including interest in taxable income as it accrues or excluding interest from taxable income until the bond is redeemed. Furthermore, before September 1, 2004, EE bonds could be exchanged for current income HH savings bonds with the accrued interest deferred until the HH bonds are redeemed. As of September 1, 2004, the U.S. Treasury ended the sale and exchange of HH savings bonds. On September 1, 1998, the Treasury began issuing Series I bonds, which guarantee the owner a real rate of return by indexing the yield for changes in the rate of inflation. Currently, EE bonds pay a fixed rate of interest. The revenue loss shown above is the tax that would be due on the deferred interest if it were reported and taxed as it accrued.

Impact

The deferral of tax on interest income on savings bonds provides two advantages. First, payment of tax on the interest is deferred, delivering the equivalent of an interest-free loan of the amount of the tax. Second, the taxpayer often is in a lower income bracket when the bonds are redeemed. This is particularly common when the bonds are purchased while the owner is working and redeemed after the owner retires.

Savings bonds appeal to small savers because of such financial features as their small denominations, ease of purchase, and safety. Furthermore, there are currently annual cash purchase limits of $5,000 per person in terms of issue price for both EE bonds and I bonds with these limits applying separately to electronic and paper bonds of each series (for a total of $20,000 per year). Because poor families save little and do not pay Federal income taxes, the tax deferral of interest on savings bonds primarily benefits middle income taxpayers.

Rationale

Prior to 1951, a cash-basis taxpayer generally reported interest on U.S. Treasury original issue discount bonds in the year of redemption or maturity, whichever came first. In 1951, when provision was made to extend Series E bonds past their dates of original maturity, a provision was enacted to allow the taxpayer either to report the interest currently, or at the date of redemption, or upon final maturity. The committee reports indicated that the provision was adopted to facilitate the extension of maturity dates.

On January 1, 1960, the Treasury permitted owners of E bonds to exchange these bonds for current income H bonds with the continued deferment of Federal income taxes on accrued interest until the H bonds were redeemed. The purpose was to encourage the holding of U.S. bonds. This tax provision was carried over to EE bonds, HH bonds, and I bonds. On February 18, 2004, the U.S. Treasury announced that HH savings bonds would no longer be offered to the public after August 31, 2004. The Treasury's press release stated that "The Treasury is withdrawing the offering due to the high cost of exchanges in relation to the relatively small volume of transactions."

Assessment

The savings bond program was established to provide small savers with a convenient and safe debt instrument and to lower the cost of borrowing to the taxpayer. The option to defer taxes on interest increases sales of bonds. But there is no empirical study that has determined whether or not the cost

savings from increased bond sales more than offset the loss in tax revenue from the accrual.

Selected Bibliography

U.S. Department of the Treasury. *A History of the United States Savings Bond Program*. Washington, DC: September 1984.

— . *U.S. Savings Bonds Online*, available at [http://www.savingsbonds.gov/], updated July 30, 2008.

— . *Individual - EE Savings Bonds In Depth*, available at: [http://www.treasurydirect.gov/indiv/research/indepth/ebonds/res_e_bonds.htm], updated December 27, 2007.

Appendix A

FORMS OF TAX EXPENDITURES

EXCLUSIONS, EXEMPTIONS, DEDUCTIONS, CREDITS, PREFERENTIAL RATES, AND DEFERRALS

Tax expenditures may take any of the following forms:

(1) special exclusions, exemptions, and deductions, which reduce taxable income and, thus, result in a lesser amount of tax;

(2) preferential tax rates, which reduce taxes by applying lower rates to part or all of a taxpayer's income;

(3) special credits, which are subtracted from taxes as ordinarily computed; and

(4) deferrals of tax, which result from delayed recognition of income or from allowing in the current year deductions that are properly attributable to a future year.

Computing Tax Liabilities

A brief explanation of how tax liability is computed will help illustrate the relationship between the form of a tax expenditure and the amount of tax relief it provides.

CORPORATE INCOME TAX

Corporations compute taxable income by determining gross income (net of any exclusions) and subtracting any deductions (essentially costs of doing business).

The corporate income tax eventually reaches an average rate of 35 percent in two steps. Below $10,000,000 taxable income is taxed at graduated rates: 15 percent on the first $50,000, 25 percent on the next $25,000, and 34 percent on the next $25,000. The limited graduation provided in this structure was intended to furnish tax relief to smaller corporations. The value of these graduated rates is phased out, via a 5 percent income additional tax, as income rises above $100,000. Thus the marginal tax rate, the rate on the last dollar, is 34 percent on income from $75,000 to $100,000, 39 percent on taxable income from $100,000 to $335,000, and returns to 34

percent on income from $335,000 to $10,000,000. The rate on taxable income in excess of $10,000,000 is 35 percent, and there is a second phase-out, of the benefit of the 34-percent bracket, when taxable income reaches $15,000,000. An extra tax of three percent of the excess above $15,000,000 is imposed (for a total of 38 percent) until the benefit is recovered, which occurs at $18,333,333 taxable income. Above that, income is taxed at a flat 35 percent rate. Most corporate income is taxed at the 35 percent marginal rate.

Any credits are deducted directly from tax liability. The essentially flat statutory rate of the corporation income tax means there is very little difference in marginal tax rates to cause variation in the amount of tax relief provided by a given tax expenditure to different corporate taxpayers. However, corporations without current tax liability will benefit from tax expenditures only if they can carry back or carry forward a net operating loss or credit.

INDIVIDUAL INCOME TAX

Individual taxpayers compute gross income which is the total of all income items except exclusions. They then subtract certain deductions (deductions from gross income or "business" deductions) to arrive at adjusted gross income. The taxpayer then has the option of "itemizing" personal deductions or taking the standard deduction. The taxpayer then deducts personal exemptions to arrive at taxable income. A graduated tax rate structure is applied to this taxable income to yield tax liability, and any credits are subtracted to arrive at the net after-credit tax liability.

The graduated tax structure is currently applied at rates of 10, 15, 25, 28, 33, and 35 percent, with brackets varying across types of tax returns. These rates enacted in the 2001 and 2003 tax bills are technically temporary (expiring in 2010). At that time the 10% rate will return to the 15% rate and the four top rates will return to 28, 31, 36, and 39.6 percent, with brackets varying across types of tax returns. For joint returns, in 2005, rates on taxable income are 10 percent on the first $14,600, 15 percent for amounts from $14,600 to $59,400, 25 percent for amounts from $59,400 to $119,950, 28 percent for incomes from $119,950 to $182,800, 33 percent for taxable incomes of $182,800 to $326,450, and 35 percent for amounts over $326,450. These amounts are indexed for inflation. There are also phase-outs of personal exemptions and excess itemized deductions so that marginal tax rates can be higher at very high income levels. These phase-outs are scheduled to be eliminated in 2010.

Exclusions, Deductions, and Exemptions

The amount of tax relief per dollar of each exclusion, exemption, and deduction increases with the taxpayer's marginal tax rate. Thus, the exclusion of interest from State and local bonds saves $35 in tax for every $100 of interest for the taxpayer in the 35-percent bracket, whereas for the taxpayer in the 15-percent bracket the saving is only $15. Similarly, the increased standard deduction for persons over age 65 or an itemized deduction for charitable contributions are worth almost twice as much in tax saving to a taxpayer in the 28-percent bracket as to one in the 15-percent bracket.

In general, the following deductions are itemized, i.e., allowed only if the standard deduction is not taken: medical expenses, specified State and local taxes, interest on nonbusiness debt such as home mortgage payments, casualty losses, certain unreimbursed business expenses of employees, charitable contributions, expenses of investment income, union dues, costs of tax return preparation, uniform costs and political contributions. (Certain of these deductions are subject to floors or ceilings.)

Whether or not a taxpayer minimizes his tax by itemizing deductions depends on whether the sum of those deductions exceeds the limits on the standard deduction. Higher income individuals are more likely to itemize because they are more likely to have larger amounts of itemized deductions which exceed the standard deduction allowance. Homeowners often itemize because deductibility of mortgage interest and property taxes leads to larger deductions than the standard deduction.

Preferential Rates

The amount of tax reduction that results from a preferential tax rate (such as the reduced rates on the first $75,000 of corporate income) depends on the difference between the preferential rate and the taxpayer's ordinary marginal tax rate. The higher the marginal rate that would otherwise apply, the greater is the tax relief from the preferential rate.

Credits

A tax credit (such as the dependent care credit) is subtracted directly from the tax liability that would accrue otherwise; thus, the amount of tax reduction is the amount of the credit and is not contingent upon the marginal tax rate. A credit can (with two exceptions) only be used to reduce tax liabilities to the extent a taxpayer has sufficient tax liability to absorb the credit. Most tax credits can be carried backward and/or forward for fixed

periods, so that a credit which cannot be used in the year in which it first applies can be used to offset tax liabilities in other prescribed years.

The earned income credit and child credit are the only tax credits which are now refundable. That is, a qualifying individual will obtain in cash the entire amount of the refundable credit even if it exceeds tax liability. Child credits are not fully refundable, however, for certain very low income families.

Deferrals

Deferral can result either from postponing the time when income is recognized for tax purposes or from accelerating the deduction of expenses. In the year in which a taxpayer does either of these, his taxable income is lower than it otherwise would be, and because of the current reduction in his tax base, his current tax liability is reduced. The reduction in his tax base may be included in taxable income at some later date. However, the taxpayer's marginal tax rate in the later year may differ from the current year rate because either the tax structure or the applicable tax rate has changed.

Furthermore, in some cases the current reduction in the taxpayer's tax base may never be included in his taxable income. Thus, deferral works to reduce current taxes, but there is no assurance that all or even any of the deferred tax will be repaid. On the other hand, the tax repayment may even exceed the amount deferred.

A deferral of taxes has the effect of an interest-free loan for the taxpayer. Apart from any difference between the amount of "principal" repaid and the amount borrowed (that is, the tax deferred), the value of the interest-free loan--per dollar of tax deferral--depends on the interest rate at which the taxpayer would borrow and on the length of the period of deferral. If the deferred taxes are never paid, the deferral becomes an exemption. This can occur if, in succeeding years, additional temporary reductions in taxable income are allowed. Thus, in effect, the interest-free loan is refinanced; the amount of refinancing depends on the rate at which the taxpayer's income and deductible expenses grow and can continue in perpetuity.

The tax expenditures for deferrals are estimates of the difference between tax receipts under the current law and tax receipts if the provisions for deferral had never been in effect. Thus, the estimated revenue loss is greater than what would be obtained in the first year of transition from one tax law to another. The amounts are long run estimates at the level of economic activity for the year in question.

Appendix B

RELATIONSHIP BETWEEN TAX EXPENDITURES AND LIMITED TAX BENEFITS SUBJECT TO LINE ITEM VETO

Description

The Line Item Veto Act (P.L. 104-130) enacted in 1996 gave the President the authority to cancel "limited tax benefits." A limited tax benefit was defined as either a provision that loses revenue and that provides a credit, deduction, exclusion or preference to 100 or fewer beneficiaries, or a provision that provides temporary or permanent transition relief to 10 or fewer beneficiaries in any fiscal year. The act was found unconstitutional in 1998, but there have been subsequent proposals to provide veto authority for certain limited benefits.

Items falling under the revenue losing category did not qualify if the provision treated in the same manner all persons in the same industry, engaged in the same activity, owning the same type of property, or issuing the same type of investment instrument.

A transition provision did not qualify if it simply retained current law for binding contracts or was a technical correction to a previous law (that had no revenue effect).

When the beneficiary was a corporation, partnership, association, trust or estate, the stockholders, partners, association members or beneficiaries of the trust or estate were not counted as beneficiaries. The beneficiary was the taxpayer who is the legal, or statutory, recipient of the benefit.

The Joint Committee on Taxation was responsible for identifying limited tax benefits subject to the line item veto (or indicating that no such benefits exist in a piece of legislation); if no judgment was made, the President could identify such a provision.

The line item veto took effect on January 1, 1997.

Similarities to Tax Expenditures

Limited tax benefits resemble tax expenditures in some ways, in that they refer to a credit, deduction, exclusion or preference that confers some benefit. Indeed, during the debate about the inclusion of tax provisions in the line item veto legislation, the term "tax expenditures" was frequently

invoked. The House initially proposed limiting these provisions to a fixed number of beneficiaries (originally 5, and eventually 100). The Senate bill did not at first include tax provisions, but then included provisions that provided more favorable treatment to a taxpayer or a targeted group of taxpayers.

Such provisions would most likely be considered as tax expenditures, at least conceptually, although they might not be included in the official lists of tax expenditures because of de minimis rules (that is, some provisions that are very small are not included in the tax expenditure budget although they would qualify on conceptual grounds), or they might not be separately identified. This is particularly true in the case of transition rules.

Differences from Tax Expenditures

Most current tax expenditures would probably not qualify as limited tax benefits even if they were newly introduced (the line item veto applied only to newly enacted provisions).

First, many if not most tax expenditures apply to a large number of taxpayers. Provisions benefitting individuals, in particular, would in many cases affect millions of individual taxpayers. Most of these tax expenditures that are large revenue losers are widely used and widely available (e.g. itemized deductions, fringe benefits, exclusions of income transfers).

Provisions that only affect corporations may be more likely to fall under a beneficiary limit; even among these, however, the provisions are generally available for all firms engaged in the same activity.

These observations are consistent with a draft analysis of the Joint Committee on Taxation during consideration of the legislation which included examples of provisions already in the law that might have been classified as limited tax benefits had the line item veto provisions been in effect. Some of these provisions had at some time been included in the tax expenditure budget, although they were not currently included: the orphan drug tax credit, which is very small, and an international provision involving the allocation of interest, which has since been repealed. (The orphan drug tax credit is currently included in the tax expenditure budget.) Some provisions modifying current tax expenditures might also have been included. But, in general, tax expenditures, even those that would generally be seen as narrow provisions focusing on a certain limited activity, would probably not have been deemed limited tax benefits for purposes of the line item veto.

Bibliographic Reference

U.S. Congress. Joint Committee on Taxation. *Draft Analysis of Issues and Procedures for Implementation of Provisions Contained in the Line Item Veto Act* (Public Law 104-130) Relating to Limited Tax Benefits, (JCX-48-96), November 12, 1996.