S. HRG. 111–736

A STATUS REPORT ON THE U.S. ECONOMY

HEARINGS

BEFORE THE

COMMITTEE ON THE BUDGET
UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

August 3, 2010–A STATUS REPORT ON THE U.S. ECONOMY

September 22, 2010–ASSESSING THE FEDERAL POLICY RESPONSE TO THE ECONOMIC CRISIS

September 28, 2010–OUTLOOK FOR THE ECONOMY AND FISCAL POLICY

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A STATUS REPORT ON THE U.S. ECONOMY

TUESDAY, AUGUST 3, 2010

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, DC.

The Committee met, pursuant to notice, at 10 a.m., in room SD–608, Dirksen Senate Office Building, Hon. Kent Conrad, Chairman of the Committee, presiding.

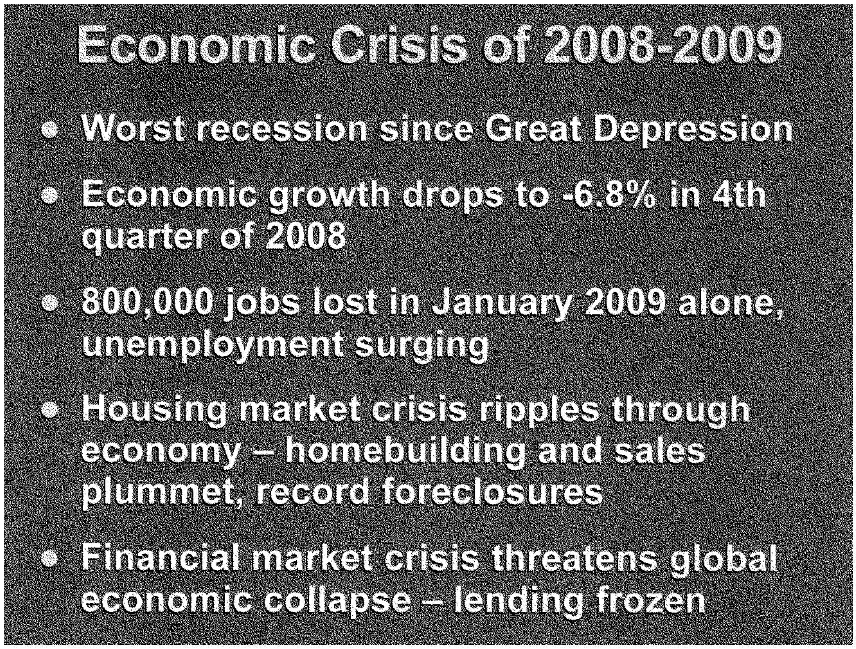
Present: Senators Conrad, Nelson, Sanders, Begich, Goodwin, Gregg, and Bunning.

Staff present: Mary Ann Naylor, Majority Staff Director; and Cheri Reidy, Minority Staff Director.

OPENING STATEMENT OF CHAIRMAN CONRAD

Chairman CONRAD. The hearing will come to order. I want to welcome everyone to the Senate Budget Committee. We are going to be doing a series of hearings on the economy. This hearing is focused on the status of the economy now, how are we doing, where are things headed. We are going to do some followup hearings on what action we should be taking here in Washington to respond to the current economic conditions. So this will be the first in a series. I am delighted Senator Gregg is with us today, and I am going to begin with an opening statement. Then we will go to Senator Gregg for any remarks that he might want to make, and then we will go to our distinguished panel of witnesses.

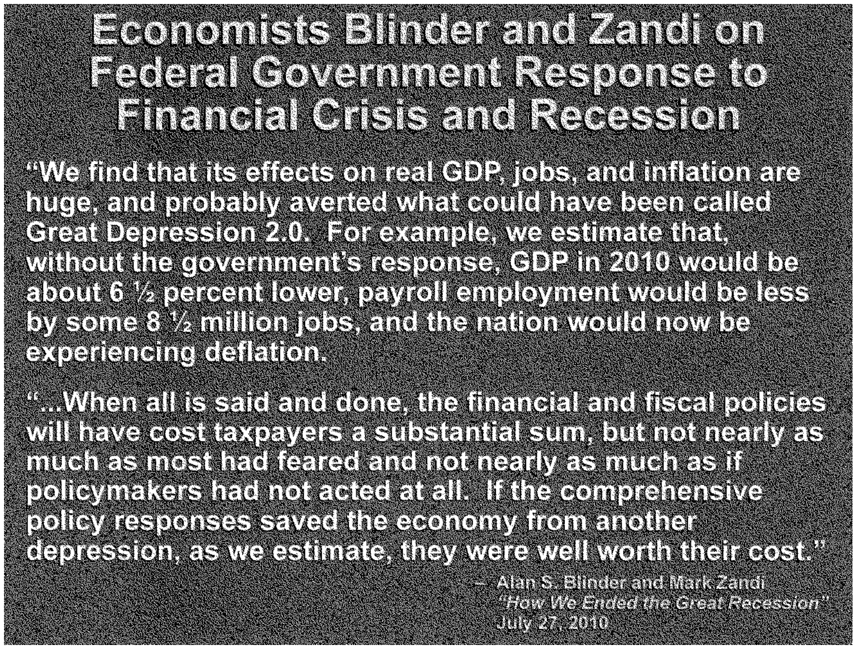
I think all of us know that we have just gone through the worst recession since the Great Depression. Economic growth in the fourth quarter of 2008 was actually a negative 6.8 percent; in other words, the economy was contracting at that point by more than 6 percent.



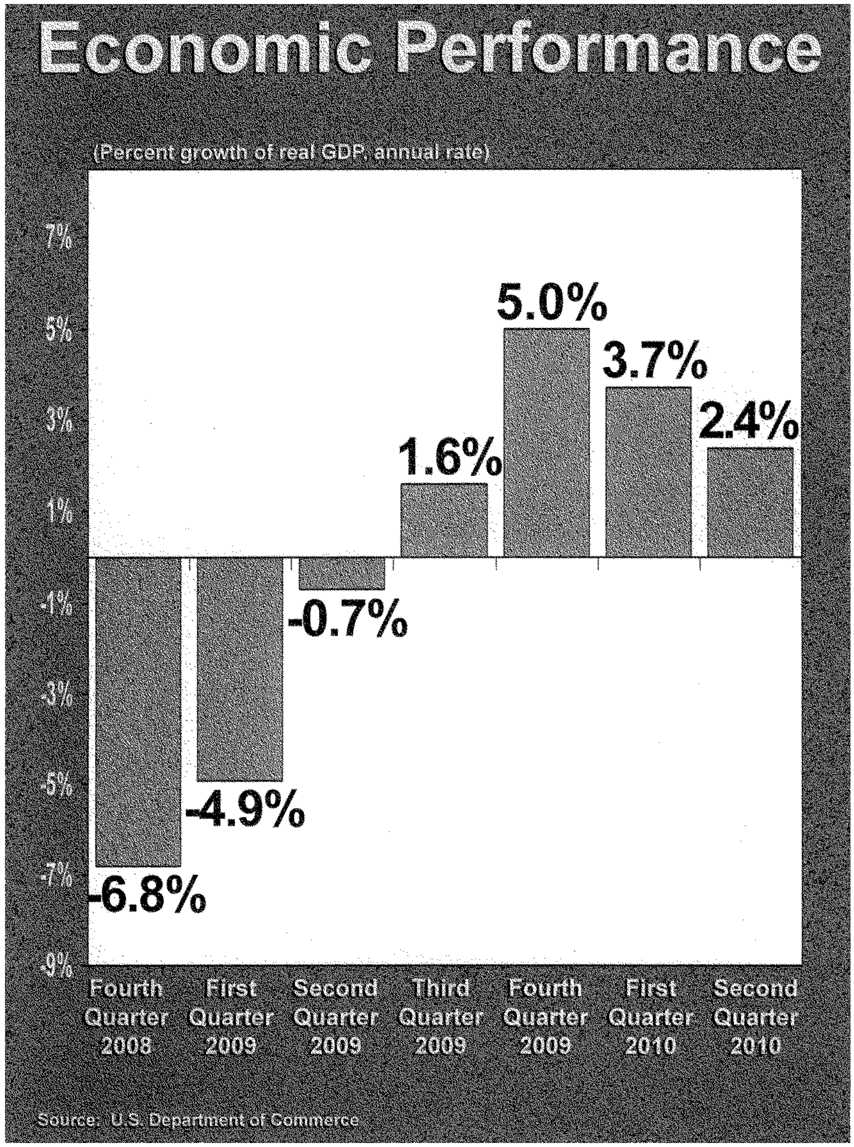
In the first month of 2009, we actually lost 800,000 jobs, and unemployment was surging. The housing market crisis rippled through the economy. Home building and sales plummeted. We had record foreclosures. We had a financial crisis that threatened a global economic collapse, a lending lockdown, and we saw very severe effects throughout the financial sector.

Let me just say I will never forget being called to a meeting—I believe Senator Gregg was there as well—when the Secretary of the Treasury and the Chairman of the Federal Reserve told us that they were going to be taking over AIG the next morning, and they told us that if they did not, they believed we would face a financial collapse in a matter of days. So this was an extraordinary crisis.

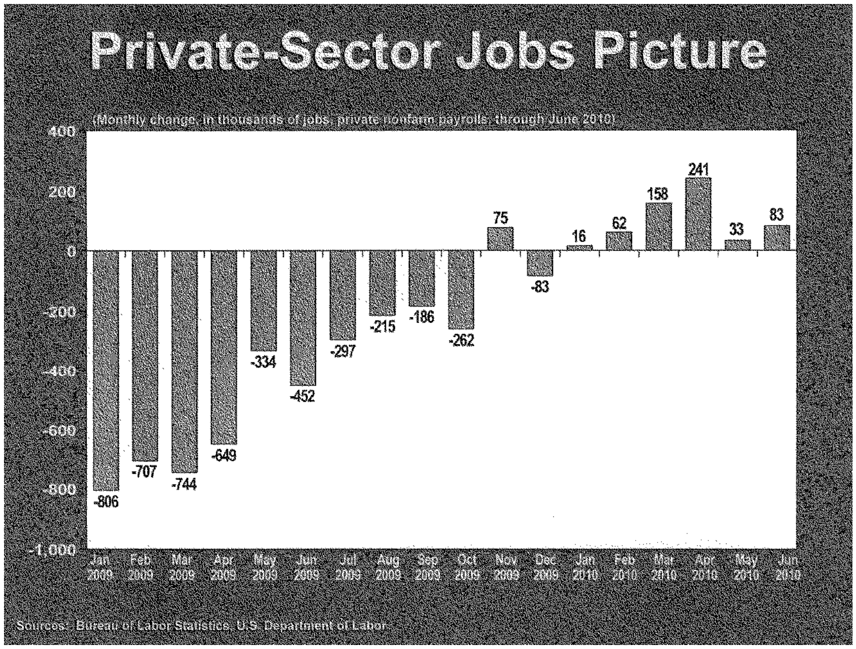
We have just received a report from the economists Alan Blinder and Mark Zandi entitled "How We Ended the Great Recession." With respect to the Federal Government's response to the crisis, they say, in part, "We find that its effects on real GDP, jobs, and inflation are huge and probably averted what could have been called a 'Great Depression II.' For example, we estimate that without the Government's response, GDP in 2010 would be about 6.5 percent lower, payroll employment would be less by some 8.5 million jobs, and the Nation would now be experiencing deflation. When all is said and done, the financial and fiscal policies will have cost taxpayers a substantial sum," they say, "but not nearly as much as most had feared and not nearly as much as if policymakers had not acted at all. If the comprehensive policy response saved the economy from another depression, as we estimate, they were well worth their cost."



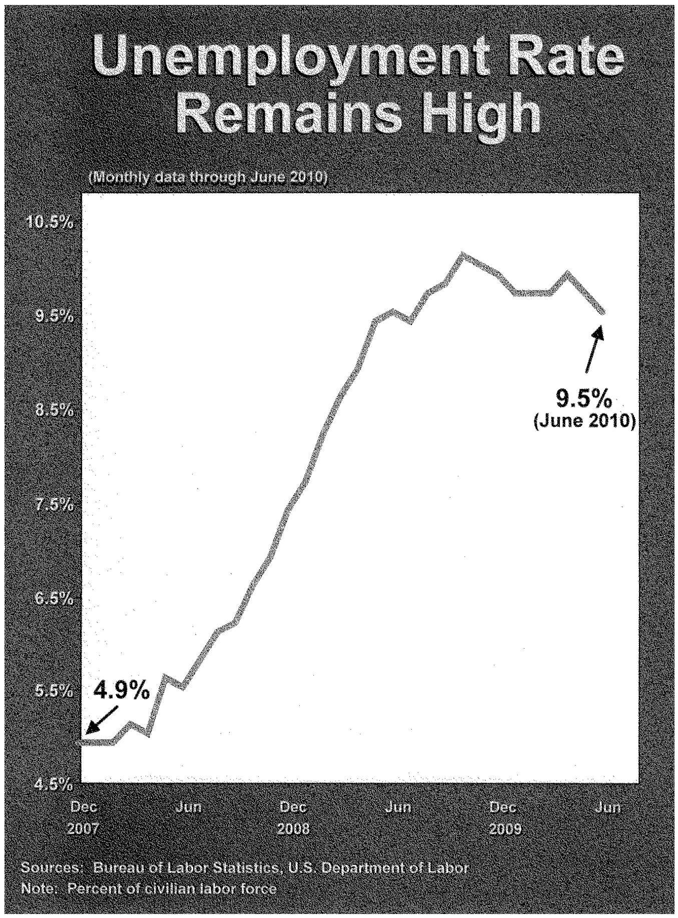
We can now look back at the economic performance. As I indicated, in the first quarter of 2008, there was a negative 6.8 percent; in the most recent quarter, the second quarter of 2010, a positive 2.4 percent; but you can see in the fourth quarter of 2009, it was a positive 5 percent. So we are seeing the recovery decelerate. That has to be a concern to all of us.



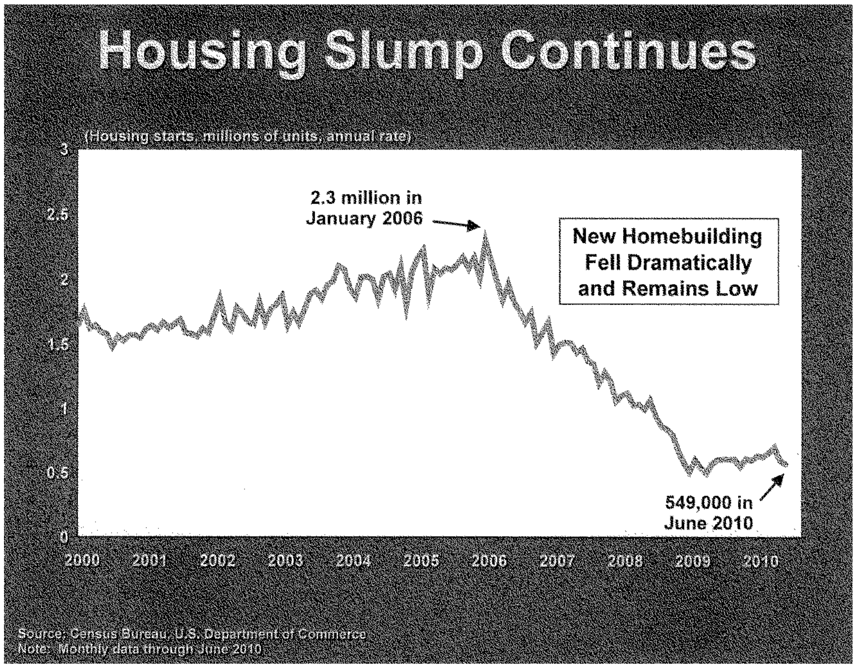
Going to the next slide, if we can, private sector jobs picture, as I indicated, in January of 2009 we lost over 800,000 jobs. In the most recent month for which we have figures, we gained 83,000—a remarkable turnaround, but well below where we need to be.



Let us go to the next slide, if we can. Unemployment remains stubbornly high at 9.5 percent. It is down from its peak but, nonetheless, too high.



If we go to the next slide, the housing slump continues. You can see the peak there. In January of 2006, we had 2.3 million housing starts on an annual basis. That was the peak. We are down dramatically off that peak to 549,000 in June of 2010.



The next slide is a USA Today story headlined, "Expect lots of layoffs at State and local levels; Tight budgets, lack of Medicaid help put governments in a bind." All of us know the States, most of them have a balanced budget requirement. So when there is an economic slowdown, revenue decreases, they are compelled to cut spending—in some cases cut it dramatically.

USA TODAY

Tuesday, July 6, 2010

Expect lots of layoffs at state, local levels

Tight budgets, lack of Medicaid help put governments in a bind

By Paul Davidson
USA TODAY

Here's another headwind for a sputtering job market: State and local governments plan many more layoffs to close wide budget gaps.

Up to 400,000 workers could lose jobs in the next year as states, counties and cities grapple with lower revenue and less federal funding, says Mark Zandi, chief economist for Moody's Economy.com.

The development could slow an already lackluster recovery. Friday, the Labor Department said employers cut 125,000 jobs, mostly because 225,000 temporary U.S. Census workers completed their stints. The private sector added 83,000 jobs, fewer then expected, as the jobless rate fell to 9.5% from 9.7%.

The economy

Layoffs by state and local governments moderated in June, with 10,000 jobs trimmed. That was down from 85,000 job losses the first five months of the year and about 190,000 since June 2009.

But the pain is likely to worsen. States face a cumulative $140 billion budget gap in fiscal 2011, which began July 1 for most, says the Center on Budget and Policy Priorities.

While general-fund tax revenue is projected to rise 3.7% as the economy rebounds in the coming year, it still will be 8%, or $53 billion, below fiscal 2008 levels, according to the National Association of State Budget Officers.

Meanwhile, federal aid is shrinking. Money for states from the economic stimulus is expected to fall by $55 billion, says the National Governors Association. And the Senate last week failed to pass a measure to provide states $16 billion for extra Medicaid funding, an initiative that would have extended benefits from last year's stimulus. The House approved $25 billion in enhanced Medicaid funding.

Philippa Dunne, who surveys state financial officials for a newsletter, the *Liscio Report*, says most plan to intensify layoffs the coming year after relying largely on furloughs.

"The downturn has gone on so long, all the low-hanging fruit has been taken," says Scott Pattison, head of the state budget officers group.

Wells Fargo economist Mark Vitner expects state and local governments to cut about 200,000 workers this year if Medicaid benefits aren't extended. That's largely why Wells Fargo cut forecasts for third-quarter economic growth to 1.5% from 1.9%.

Even if Congress extends Medicaid subsidies, Zandi expects 325,000 job cuts the next year, though Vitner says losses could be far less.

Among cuts planned and made:

▸ New York City is planning 4,500 layoffs, and more if the Medicaid subsidies aren't approved, says the Center on Budget and Policy Priorities.

▸ Washington state would have to chop 6,000 jobs without the Medicaid money.

▸ The city of Maywood, Calif., laid off all 68 of its employees July 1 and is contracting out police services, partly because of a $450,000 budget deficit.

See the latest jobs forecast for 384 metro areas and all 50 states at money.usatoday.com.

The next slide is "Cuts in Europe stoke global fears; Britain and Germany plan drastic austerity measures that may hamper recovery in the United States." I also want to indicate in my contacts with business leaders across the country, they tell me that the financial crisis in Europe has had a notable effect on the economy here; that is, they have told me, almost without exception, that the recovery was going quite well until the European debt crisis hit, and that has slowed economic growth here, and it certainly has affected those countries as well.

Los Angeles Times

FRIDAY, JUNE 25, 2010

CUTS IN EUROPE STOKE GLOBAL FEARS

Britain and Germany plan drastic austerity measures that may hamper recovery in the United States.

DON LEE
REPORTING FROM WASHINGTON

HENRY CHU
REPORTING FROM LONDON

TOM PETRUNO
REPORTING FROM LOS ANGELES

Europe's debt crisis sent more shockwaves around the world Monday as Britain's new prime minister announced drastic cutbacks in government spending and Germany pressed ahead with its own austerity plans — steps that are likely to impede the U.S. and global economic recoveries.

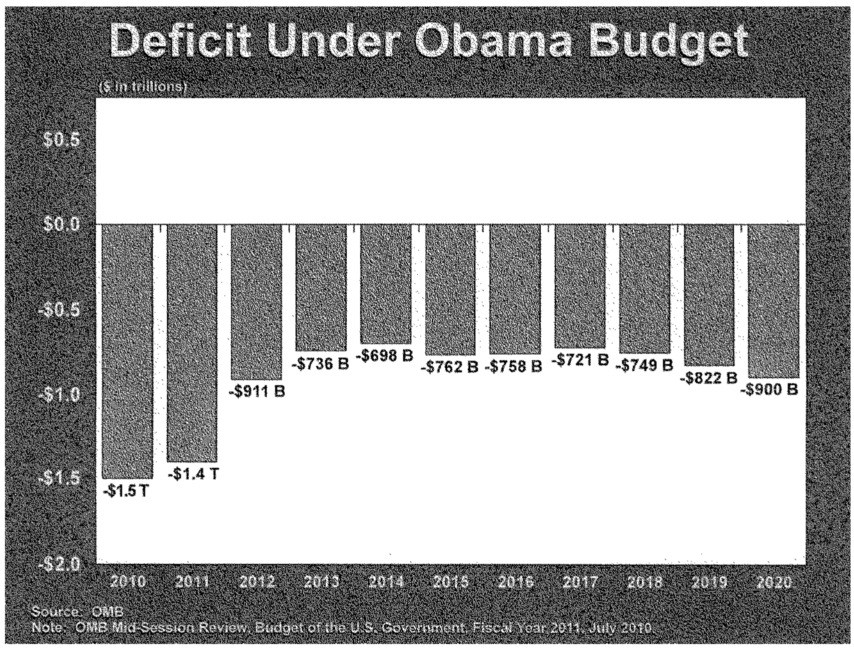
British Prime Minister David Cameron warned that spending cuts would be felt "for years, perhaps even decades." And German Chancellor Angela Merkel, who presides over Europe's biggest economy, announced similar plans for spending reductions, higher taxes and other belt-tightening measures.

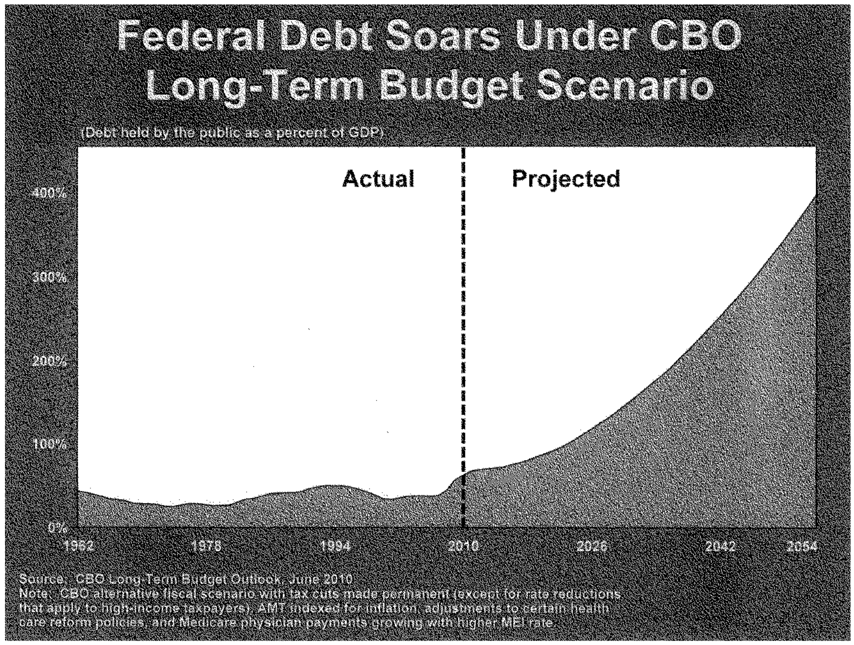
The British and German actions reflect concern about the consequences of government debt crises in Greece, Spain and other weaker European economies, but they also amount to a blunt rejection of the Obama administration's warnings that cutbacks now could imperil the global recovery.

Europe's woes already

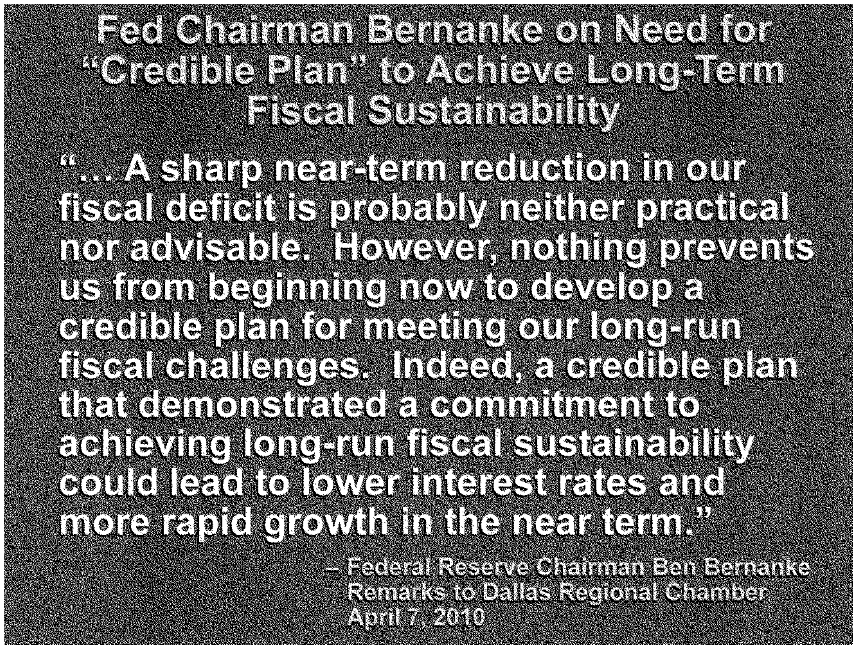
If we look at the deficit, we see that under the President's proposal the deficit will come down quite sharply over the next 5 years, but not sharply enough in the judgment of many of us. Most concerning to me are the years beyond the next five, where we see the deficit again rising. That cannot be the course for the country. That is why the fiscal commission has been put in place to come up with a long-term plan to deal with deficits and debt. But what has been outlined in the President's budget for the long term cannot be the course that we take. That would simply add too much to the debt, and we are going to have to face up to that, as shown in the next slide, because this is a longer-term by the Congressional Budget Office looking at 2010 and beyond, going out to 2054. And if we stay on the current course, we will have a debt that approaches 400 percent of the gross domestic product of the country.

Now, let me state that again. If we stay on the current course, the Congressional Budget Office tells us by 2054 we will have a debt that will be 400 percent of the gross domestic product of the country. Nobody believes that is sustainable. Nobody believes we would not face a financial crisis well before 2054.





Let me go to the final slide, which is the Chairman of the Federal Reserve Board saying that we need a credible plan to achieve long-term fiscal sustainability. Ben Bernanke, the Federal Reserve Chairman, on April 7th said to the Dallas Regional Chamber, "A sharp near-term reduction in our fiscal deficit is probably neither practical nor advisable. However, nothing prevents us from beginning now to develop a credible plan for meeting our long-run fiscal challenges. Indeed, a credible plan that demonstrated a commitment to achieving long-run fiscal sustainability could lead to lower interest rates and more rapid growth in the near term."



So that is the challenge before us. It is absolutely imperative that we develop a plan and implement a plan to face up to our long-term debt.

With that, I want to go to our witnesses, start with Dr. Berner, if we just go left to right—ah, we are going to hear from Senator Gregg first.

Senator GREGG. Trying to shut me off again.

[Laughter.]

Chairman CONRAD. I would never try to shut you off. I was so eager—honestly, I am so eager to hear from these witnesses. I was going to go to them and then maybe turn to you after the hearing was concluded.

[Laughter.]

Senator GREGG. That would have been perfect timing. Perfect timing.

Chairman CONRAD. Senator Gregg.

OPENING STATEMENT OF SENATOR GREGG

Senator GREGG. First off, I appreciate the Chairman holding this hearing, and I especially appreciate this very exceptional panel that has been put together, and I look forward to hearing from them also.

I also want to commend the Chairman for putting forth some stark numbers that are accurate, as he always does, and once again pointing out that the path that we are on simply is not sustainable as a Nation. I asked my staff was that—off the top of my head, I did not know the answer to this question—what the Greek gross debt to GDP ratio is, of course, Greece having basically defaulted and then been saved. And they said it was about 100 percent. I am not sure if that is their public debt or their gross debt. But, anyway, your number of 400 percent for gross debt is a staggering number. We know our public debt goes to close to 100 percent during the timeframe that you have discussed there.

Let me just take a more global view of the issue. I know our witnesses are going to take sort of a macro view. Let me—or a micro view. Let me take more of a macro view.

If we look at what is happening here, we are seeing a new normal, as is the term used, I guess, by Mohamed El- Erian, in the way we work as a Nation and the way we function as a Nation. And I am not sure it is a good new normal because basically we are taking American exceptionalism, which I believe has always been uniquely founded on the basis of fiscal responsibility, individual entrepreneurship, and the capacity of the country to grow as a result of people taking risks and creating jobs, which require access to capital and access to credit which was reasonably available at a fair price, and we have contracted all of this. We are contracting it because the Government is growing so far. The Government has gone from 20 percent of GDP just 2–1/2 years ago to now it is 24 percent of GDP; it is projected to go to 26 to 27 percent of GDP. Historically, it has always managed to be in the range of 19 to 20 percent of GDP since the end of World War II.

Even if our revenues recover to their historic levels—and it appears they will; in fact, under the President's budget it looked like they will exceed our normal levels, the normal level of revenues being about 18.2 percent of GDP; the President is projecting they will go to 20 percent within 3 years—we cannot fill this gap. We cannot fill this gap because the Government has simply grown too much. And the question is: How do we bring the Government back down? But how do we do it in a way that does not stifle this recovery to the extent we are having recovery?

That really becomes a very complicated two-step event for us as people who are the keepers of fiscal policy and for the keepers of monetary policy, because if we act precipitously to try to control the deficit, do we end up stifling the recovery? But if we do not act soon enough or put in place a reasonably acceptable plan which is perceived by the markets, both internationally and domestically, as legitimate to bring down the long-term debt, then do we aggravate the capacity to get a short-term recovery also? Because I happen to believe a short-term recovery depends on the markets, and specifically the marketplace, Main Street believing that we are going to get our fiscal house in order. But in getting it in order, how do we do it in a way that does not also dampen this slow recovery?

So these are the complicated policy issues we face, and I would be interested to hear from our witnesses as to what they think. What can we do in the short term on the deficit, or what should we do, and what must we do in the long term on the deficit in order to give ourselves viability as a Nation that we are going to be serious about the fiscal insolvency of our country and, therefore, our recovery?

So I look forward to hearing from our witnesses on whatever they want to talk about, but hopefully on these topics. Thank you.

Chairman CONRAD. I thank the Senator for his very good opening statement. Really, I agree with the way he has framed it. I think he has framed it very, very well.

Before we turn to the witnesses, I also want to welcome the newest member to this Committee, Senator Goodwin of West Virginia, who is here. We very much regret the passing of Senator Byrd, who was a giant in the Senate, a valuable member of this Committee. But we are delighted that Senator——

Senator GREGG. Who wrote the bill that created this Committee.

Chairman CONRAD. Wrote the bill that created this Committee, and many of the rules under which we operate. We are delighted that Senator Goodwin has agreed to join this Committee. Senator Goodwin, we look forward very much to working with you. This Committee has a heavy responsibility, and based on what I have seen of your past and your conduct as a new Senator, you will be up to the responsibilities that this Committee faces. Welcome. We are glad to have you here.

Senator GOODWIN. Thank you.

Chairman CONRAD. Next we will turn to our witnesses: Richard Berner, the managing director and co-head of Global economics, chief U.S. economist at Morgan Stanley; Dr. Simon Johnson, a senior fellow at the Peterson Institute for International Economics and a professor of entrepreneurship at MIT's Sloan School of Management; and Dr. Joel Naroff, the president and founder of Naroff Economic Advisers. I hope I am pronouncing your name correctly, Dr. Naroff.

Mr. NAROFF. That is correct.

Chairman CONRAD. Great.

Dr. Berner, welcome. Please proceed.

STATEMENT OF RICHARD BERNER, PH.D., MANAGING DIRECTOR, CO-HEAD OF GLOBAL ECONOMICS, AND CHIEF U.S., ECONOMIST, MORGAN STANLEY & CO., INC.

Mr. BERNER. Chairman Conrad, Ranking Member Gregg, and other members of the Committee, thank you for inviting me here to discuss the state of the U.S. economy and, with your permission, also to talk a little bit about what policymakers can do to improve it.

First, a status report on the economy. As you noted, Mr. Chairman, we have emerged very slowly from the worst financial crisis since the Great Depression. But the legacy of that crisis is scattered across the landscape, and you noted some of the things that are important. I would add that one in four homeowners with a mortgage owes more than their house is worth. Lenders are still hesitant to lend to or refinance many borrowers. The process of cleaning up lenders' and household balance sheets is incomplete, so additional, steady progress is required to achieve a sustainable recovery.

Likewise, headwinds from the crisis linger. GDP is still 1 percent below its peak of 2 years ago. Federal, State, and local budgets are strained, as you noted. A faster pace of job and hours gains is required to generate needed income and also consumer confidence.

This subpar recovery has left housing vacancy rates and the unemployment rate high, and other measures have slackened the economy high. So there is a “tail risk” that inflation could sink too low and turn into deflation. While I see signs of a bottoming in inflation at low rates, not deflation, we cannot take that outlook for granted.

What about the outlook for our economy? Nonetheless, despite those problems, moderated but sustainable growth of about 3 to 3.5 percent through 2011 is likely. Now, I would note that is still pretty tepid for the first couple of years of a recovery, but four factors underpin that view.

First, the shock from the European sovereign debt crisis that you noted earlier has begun to fade, and financial conditions over the past several weeks have improved, and that is essential for growth.

Second, and more broadly, global growth, especially in the big emerging market countries where domestic demand is now strong, is still hearty. We expect global growth to be 4.7 percent this year, 4.2 percent next year. And, for example, although the Chinese economy has slowed in respond to restraints on lending and tighter monetary policy, growth is still strong. We estimate it is slowing from about 10 percent this year to 9.5 percent next year.

Third, the ongoing revival in job and income gains, although modest, will provide income gains sufficient to sustain 2 to 2.5 percent consumer spending growth. Now, that is a big step-down from the past but nonetheless sustainable. And we expect data this Friday to show that hours and payrolls improved somewhat in July.

And, finally, infrastructure spending, the last part of the fiscal stimulus enacted in 2009, is now starting to gain steam.

Five aspects of the recent data that we saw from our national income accounts I think support that reasoning.

First, domestic demand accelerated in the second quarter to over 4 percent. That pace is not sustainable, but I think around 3 percent probably is, and it is likely.

Second, we have seen the personal saving rate ramp up very significantly, suggesting that American consumers have rebuilt their saving and balance sheets by paying and writing down debt more than previously thought. Most important, underlying income growth in the revised data that we got last week is now stronger. So I think the consumers will spend more of that income in the second half of the year.

Third, a wider trade gap was a drag on growth in the first half, but I see signs that it is likely to narrow as global growth persists and U.S. producers satisfy more global and domestic demand.

Fourth, the rebound in profitability has been sharper than expected, and peak profit margins still lie ahead. So businesses now have the wherewithal to replace worn-out equipment, and they are spending money on those things to do it.

And, finally, inflation measured by the Fed’s preferred gauge of the core personal Consumer Price Index has run at about a 1.4-percent pace over the past year—still very low, but a couple of tenths higher than previously thought. And with rents now firming in apartments and elsewhere, those revisions reinforce our conviction that inflation is now bottoming and that the deflation scare will be just that—a scare. But there are obvious risks to any scenario, and I would mention two that are important to me.

First, it remains in housing. In addition to the payback following expiration of the first-time homebuyer tax credit, the downside risks to home prices, mortgage credit availability, and housing demand are still present.

Second, policy and political uncertainty. We think increased uncertainty around taxes and the implementation of health care and regulatory reform is a key reason that consumer confidence slipped in the last couple of months. It is not the only reason, but I think it is an ingredient.

In the rest of my time, I would like to discuss some policies that Congress might consider to improve the outlook for housing and employment, two key areas that need attention, and thus the overall economy.

First, housing. As I noted when I testified before this Committee in January 2009, mitigating foreclosures is necessary to stem the slide in house prices, slow credit losses, and reduce the pressure on household wealth. But neglect in the past 18 months has created two related, additional risks. The first is from accelerating strategic defaults, which are now 18 percent of total defaults. These are borrowers who can pay but who are so far under water they choose to mail the keys back to their lenders. In addition, high loan-to-value ratios, appraisal problems, unemployment, and low credit scores block refinancing opportunities.

I think the best options for relief continue to be simple, act quickly, and spread the pain broadly. Unfortunately, one program, the Home Affordable Modification Program, or HAMP, has fallen short.

Two policy changes announced in March—a new "earned principal forgiveness" initiative, and the short refinance program through the FHA—could help. Earned principal forgiveness gives the borrower a strong incentive to stay current on modified payments by turning a portion of initial principal forbearance into principal forgiveness for each year the borrower stays current.

These programs should be strengthened. They are not working because the language in the forgiveness modification rules is weak, and the FHA short-sale program continues to be advertised as being de minimis, with lenders pushing back on both.

Another proposal to enable borrowers to refinance Government-guaranteed mortgages comes from my colleague David Greenlaw. Senator Gregg, I would note that Mr. Greenlaw hails from the great State of New Hampshire. The Government has guaranteed the principal value of the 37 million mortgages are backed by the agencies. There would be no credit risk for a mortgage originator who agreed to refinance these mortgages if the Government guarantee was extended to refinanced loans. I will not go into details. We can provide those to you. But Dave estimates that households would save $46 billion annually if half the mortgages among these 37 million were refinanced.

What about policies to improve employment? Private nonfarm payrolls obviously have been flat over the past year, much less than we would hope. And clearly, much of that weakness is cyclical, related to the tepid state of the recovery.

In our view, however, there are four structural components also at work. One is the cost of labor resulting from the escalation of benefits. The problem is that thanks to that high fixed costs of health and other benefits or labor costs are of line with other countries when adjusted for living standards. I say fixed because benefit costs do not vary with hours worked; they are paid on a per worker basis. So as employers seek to cut the cost of compensation in tough times, these benefit costs drive a growing wedge between total compensation and take-home pay and continue to escalate the cost. The recession made that wedge bigger, leaving benefits intact.

Long-term solutions include implementation of health care reform to save costs and, of course, innovation to boost productivity and labor skills. The Affordable Care Act will possibly realize cost savings through Medicare, but more work is needed to reduce the soaring costs of health care for employers and employees alike.

Short-term remedies: Perhaps a refundable payroll tax credit, we have one of those, but more aggressive implementation might be helpful.

The second obstacle is a mismatch in skills. The problem is that for years employers have complained that they do not find the skills they need in today's work force. Long-term solutions include policies that keep students in school and improve access to education, reorientation of our higher educational system toward specialized and vocational training and community colleges, and immigration reform.

In terms of short-term remedies, beyond unemployment insurance, one remedy would pair training and basic skills that are needed for work with income support. Two other groups seeking employment—newly minted college students and unemployed teachers perhaps—could be an ideal nucleus for a Job Training Corps that would empower job seekers with new skills.

The third obstacle is related to housing: labor immobility. Negative among a Nation of homeowners leads to substantially lower mobility rates—one-third less, according to one study. Long-term solutions obviously include some of the ones I have outlined before. Short-term remedies beyond the ones I talked about would include an effort to establish a protocol for short sales and/or principal reduction, which should be a useful tool.

And the last obstacle is the policy uncertainty factor I mentioned above. Obviously we need to solve our long-term challenges, but the uncertainty around the implementation of the legislation and the solutions we have adopted I think is to some extent weighing on business and consumer decisions to hire, expand, buy homes, and spend.

I can tell you as somebody who works in financial markets that market participants are used to thinking that political gridlock is good because it keeps politicians from interfering with the marketplace. Well, today gridlock is more likely to be bad for markets, as our long-term economic problems require solutions with political action.

Long-term solutions obviously require bipartisan leadership, and, Mr. Chairman and Ranking Member Gregg, your work as Commissioners on the deficit reduction commission is obviously critical. I know you agree that crafting a long-term credible plan, as you just mentioned, to restore fiscal sustainability will ease concerns and uncertainty about future tax hikes and the potential loss of our safety nets.

In addition, reducing policy uncertainty now could be a tonic for growth, offering investors a chance to reassess the fundamentals again. For example, we assume that Congress will agree to a 1-year extension of all expiring tax cuts and other provisions. Doing so should reduce uncertainty as well as sustain fiscal stimulus. Obviously, the sooner such action is implemented, the sooner the reduction in uncertainty can be achieved.

Mr. Chairman and members of the Committee, we have many challenges ahead. Our short-term challenge is obviously to enhance the odds for a more vigorous, and our long-term challenge to promote a sustainable fiscal policy and to reform our entitlement and other programs that represent claims on our future resources.

Thank you for your attention and for the opportunity to offer advice. I would be happy to answer any questions you may have.

[The prepared statement of Mr. Berner follows:]

A Status Report on the U.S. Economy
Testimony of Richard Berner, Morgan Stanley
Senate Budget Committee
August 3, 2010

Chairman Conrad, Ranking Member Gregg, and other members of the Committee, my name is Richard Berner. I am Co-Head of Global Economics at Morgan Stanley in New York. Thank you for inviting me to this hearing to discuss the state of the US economy, the outlook, and what policymakers can do to improve it.

A Status Report on the Economy

We have emerged slowly from the worst financial crisis since the Great Depression. The crisis and the credit crunch that followed are over and most financial markets are functioning.

But the legacy of the crisis is scattered across the economic landscape. One in four homeowners with a mortgage owes more than their house is worth. Lenders are still hesitant to lend to or refinance many borrowers. And while the process of cleaning up lenders' and household balance sheets is well advanced, it is incomplete. Additional, steady progress is required to assure a sustainable recovery.

Likewise, we have emerged slowly from the deepest recession since the Great Depression. Aggressive and unconventional monetary policy and fiscal stimulus have ended the credit crunch, and strong global growth has been an economic tailwind.

But headwinds from the crisis linger. GDP has recovered by only 3.2% over the past year, so it is still 1% below its peak of two years ago. Federal, state and local budgets are strained, apparently limiting the scope for additional policy action. Job and hours gains have been encouraging, but a faster pace is required to generate the household income and confidence needed to sustain recovery, and to recover sooner the 8.4 million jobs lost in the recession.

This subpar recovery leaves substantial slack in the economy. For example, housing vacancy rates and the unemployment rate are high — too high — and industrial operating rates are still low. That slack means there is a 'tail risk' that inflation will sink too low and turn into deflation. The Fed has maintained stable inflation expectations, which will limit that risk. While I see signs of a bottoming in inflation at low rates — not deflation — we cannot take the outlook for granted.

The Outlook: Moderate Growth, not a Double Dip

In this portion of my remarks, I'll turn to the outlook. I'll outline the reasons for our slightly above-trend growth outlook, and why I believe the odds of a renewed downturn are remote.

In my view, moderate but sustainable growth of 3 to 3½% through 2011 is likely. Yet the deceleration from 5% in Q4 to 2.4% in Q2 has reinforced the consensus outlook for sluggish, below-trend growth (Slide 1). Extrapolating that deceleration, many believe that 1-2% growth in the second half is a given. And the tail risk of deflation is a widespread concern.

We admit that 2.4% growth, if it were to continue, lies barely on the threshold of a sustainable economic recovery:

- It is only just fast enough to generate the jobs and hours needed to extend income growth for moderate gains in consumer spending.
- But it is not fast enough to continue to narrow slack in the economy — key for reducing the tail risk of deflation and maintaining operating leverage for corporate profits.

In contrast, I think a pickup in growth is coming. Four factors underpin that view:

1. The shock from the European sovereign crisis has faded, allowing financial conditions to renew their easing, which is essential to growth.

2. Global growth, especially in the big Emerging Market countries where domestic demand is strong, is still hearty. For example, it appears that the Chinese economy has slowed in response to restraints on lending and tighter monetary policy. But we estimate that it is slowing from 10% this year to 9.5% in 2011 — still strong.[1]
3. The ongoing revival in job and income gains will provide income growth sufficient to sustain 2-2.5% consumer spending growth. Friday's data should show that nonfarm payrolls and hours rebounded in July.
4. Finally, infrastructure spending, the last part of the fiscal stimulus enacted in 2009, is now gathering steam.

Five aspects of the latest GDP data support that reasoning.

First, domestic final demand accelerated to a 4.1% annual rate in Q2. That pace is not sustainable, as housing seems to be fading again. But 3% growth in overall final sales is both sustainable and likely. And we think upcoming news on vehicle sales and retailing will kick the quarter off with a bang.

Second, American consumers have rebuilt saving and balance sheets by paying and writing down debt more than previously thought.[2] As seen on slide 2, the personal saving rate, at 6.2% in Q2, has tripled from the 2005-07 bubble period norm. Most important, underlying income growth is stronger than previous estimates. Consequently, I believe consumers will spend more of their income in H2.

Third, a wider trade gap was a drag on growth in the first half. We think that the trade gap will narrow again as global growth persists and US production indicators firm, indicating that domestic producers are satisfying more global and domestic demand.

Fourth, while the recession crushed profitability, the rebound has been equally sharp. Margins proxied by the measure in slide 3 were still below record highs as of Q1, and we think peak margins still lie ahead. So companies have wherewithal to spend and clearly have begun to invest to replace worn-out and obsolete equipment in a sustainable way.

Finally, inflation measured by the Fed's preferred inflation gauge has run at a 1½% pace over the past year — still low, but a couple of tenths higher than previously thought. With rents now firming, those revisions reinforce our conviction that inflation is bottoming and that the deflation scare is just that — a scare.[3]

Of course, there are two key risks to our scenario:

1. *Housing*. In addition to the "payback" following expiration of the first time homebuyer tax credit, the downside risks to home prices, mortgage credit availability and housing demand are still present.
2. *Policy/political uncertainty*. We think increased uncertainty around taxes and implementation of healthcare and regulatory reform is a key reason that consumer confidence slipped in the last couple of months.

Policies to Improve the Outlook

In the rest of my time, I'll discuss some policies that Congress might consider to improve the outlook for housing and employment, and thus the overall economy.

Chairman Conrad and members of the Committee, eighteen months ago I testified before this Committee.[4] I argued then that:

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[1] See "China Economics: Goldilocks on Track Despite Faster Moderation in Growth," Morgan Stanley Research, July 15, 2010.

[2] For comparison, see "Deleveraging the American Consumer," Morgan Stanley Research, May 27, 2009.

[3] See "Don't be Sidetracked by the Inflation Measurement Debate," Morgan Stanley Research, April 15, 2010

[4] "The Debt Outlook and Its Implications for Policy," January 15, 2009

> History suggests that financial crises take time to fix, because they result in deep and prolonged declines in asset values, and thus deep recessions (see Carmen M Reinhart and Kenneth Rogoff, "The Aftermath of Financial Crises," January 3, 2009). And as I read it, history also suggests that policies that go directly to the cause of the crisis are most effective.
>
> As you debate the size and composition of a fiscal stimulus package, therefore, keep in mind that tax cuts and stepped-up infrastructure outlays, whatever their merits, don't get to the causes of this downturn. They mainly tackle its symptoms and can only cushion the blow.

I still doubt that traditional fiscal stimulus is the right tool for the job. And I still strongly believe that we have yet to implement policies that go directly to the cause of our problems.

Policies to Improve Housing
I mentioned earlier that the legacy of the financial crisis still lingers for housing lenders and mortgage borrowers. As I noted in January 2009, rising foreclosures worsen the imbalance between housing supply and demand. Mitigating foreclosures is necessary to stem the slide in home prices, slow credit losses, and reduce the pressure on household wealth. Of course, not all foreclosures can or should be prevented. Offering help to the 5 million borrowers who are in serious trouble will create moral hazard by attracting the 50 million who aren't. It is hard to segregate responsible borrowers and lenders from those who weren't. Poor underwriting has resulted in redefault rates of 50% or more for modified loans.

But neglect in the past eighteen months has created two related, additional risks. The first is from accelerating "strategic defaults." Our analysis now shows that 18% of defaults over the past three months resulted from borrowers who can pay but who are so far under water that they choose to mail the keys back to the lender. In addition, many borrowers simply cannot take advantage of today's historically low borrowing rates, especially to refinance their mortgages. High loan to value ratios (LTVs), appraisal problems, unemployment, and low credit scores block refinancing opportunities.

These risks imply that the slide in home prices is not over. In our view, prices for non-distressed homes are still falling, which affects the wealth and confidence of all homeowners.

The best options for relief continue to be simple, act quickly, and spread the pain broadly among borrowers, lenders, and taxpayers. Unfortunately, the scope of the Home Affordable Modification Program (HAMP) has shrunk. Only about 350,000 permanent HAMP modifications are in place, and more than twice that many borrowers have fallen out of the HAMP trial modification program. At this rate, HAMP will hardly reach the 3-4 million borrowers that the administration targeted.

Two policy changes announced on March 26 – a new "earned principal forgiveness" initiative in HAMP, and the short refinance program through the FHA – could help reduce the risks of foreclosure. "Earned principal forgiveness" gives the borrower a strong incentive to stay current on modified payments by turning a portion of initial principal forbearance into principal forgiveness for each year the borrower stays current. The new short refinance program is meant for currently performing but underwater mortgages and provides for FHA refinancing of such mortgages after the lender agrees to principal forgiveness.

These programs should be strengthened. They aren't working because the language in the principal-forgiveness modification rules is weak, and the FHA short-sale program continues to be advertised as being de minimis, with lenders pushing back on both.

Another proposal to enable borrowers to refinance government guaranteed mortgages comes from my colleague David Greenlaw.[5] The government has guaranteed the principal value of a very large portion of the mortgage market — specifically, the 37 million mortgages that are backed by Fannie, Freddie and Ginnie Mae. There would be no credit risk for a mortgage originator who agreed to refinance these mortgages if the government guarantee was extended to the refinanced loans. That could lower rates for borrowers and streamline the refinance process. Dave estimates that households would save $46 billion

[5] See "Slam Dunk Stimulus," Morgan Stanley Research, July 27, 2010.

annually if the mortgage rate could be reduced by 125 basis points on 50% of the outstanding volume of such mortgages. At the very least, regulators could waive the so-called "put back" authority for refinancing of agency-backed mortgages. This would help to unclog the refi pipeline at zero cost to the government.

Eighteen months ago I noted that

> The economic cost of further declines in home values would likely exceed the cost of mitigation. More ominously, letting foreclosures fester may erode the sanctity of the mortgage contract for an increasing number of borrowers, who will decide that making payments is optional. If many borrowers walk away from their houses and their obligations, losses to lenders will rise dramatically and the availability of credit will dry up.

That is still true today.

Policies to Improve Employment
Private nonfarm payrolls have been flat over the past year, compared with a 2.3% average gain in the first year of the past seven recoveries. Diagnosing the causes of the exceptional weakness in employment is critical before recommending remedies. Clearly, much of that weakness is cyclical, reflecting the sub-par rebound.

In our view, however, four structural culprits are also at work: Rising benefit costs; mismatches between skills needed and those available; labor immobility resulting from negative equity in housing; and uncertainty around policies in Washington. Each has both a long-term structural and a shorter-term cyclical element. For each, we first discuss the problem and the long-term solutions. Then we turn to what policymakers can do to help the economy and the labor market improve as quickly as possible.

Obstacle 1. Cost of labor resulting from escalation in benefits. The problem: Thanks to the high "fixed" costs of health and other benefits, and of taxes on labor to pay for the social safety net, our labor costs are out of line with other countries when adjusted for living standards. I say "fixed" costs because benefit costs don't vary with hours worked; they are paid on a per-worker basis. As employers seek to cut the cost of compensation, these benefit costs drive a growing wedge between total compensation and take-home pay. Unlike in other countries where healthcare benefits are not directly part of compensation, these rising costs likely have intensified employers' efforts to boost productivity by cutting payrolls.[6] The recession made the wedge between compensation and wages bigger, as cost-cutting private-sector employers cut take-home pay while leaving benefits intact. So relative labor costs go up versus other countries while median pay suffers.

Long-term solutions include implementation of healthcare reform to save costs and innovation to boost productivity and labor skills. The Affordable Care Act includes a series of reforms aimed at cost savings for Medicare, but more work is needed to reduce the soaring costs of healthcare for employers and employees alike. Policies that boost worker productivity will reduce labor costs and will be a win-win for employers, employees and overall living standards, because real wages will rise.

Short-run remedies: A refundable payroll tax credit, perhaps for firms that increase their payroll, would be among the most effective short-run remedies. CBO estimates that a well-designed credit could boost employment by about 9 years of full-time equivalent employment per million dollars of budgetary cost. [7]

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[6] See Sarah Reber and Laura Tyson, "Rising Health Insurance Costs Slow Job Growth and Reduce Wages and Job Quality," Working paper, University of California at Los Angeles, August 2004; Katherine Baicker and Amitabh Chandra, "The Labor-Market Effects of Rising Health Insurance Premiums," NBER Working Paper 11160, February 2005; and Richard B. Freeman and William M. Rodgers III, "The Weak Jobs Recovery: Whatever Happened To The Great American Jobs Machine?" November 2004, Revised January 2005.

[7] See Congressional Budget Office, "Policies for Increasing Economic Growth and Employment in the Short Term," February 2010.

Obstacle 2. Skills mismatch. The problem: For years, employers have complained that they don't find the skills they need in today's workforce. Worker skills have greatly lagged technical change and tectonic shifts in the structure of our economy. Immigration restrictions and massive dislocations in several industries in recession have magnified that mismatch as workers who have been trained for one occupation lose their jobs. A May 2010 Manpower research survey showed that even in recession, 14% of firms reported difficulty filling positions due to the lack of suitable talent available in their markets; in 2006 the same survey reported that 44% of firms couldn't find the skills needed. That speaks to the depth of recession; it is clear that a large portion of the long-term unemployed lack requisite skills. And even in healthcare, an oasis of job growth, there is a growing nursing and nursing skills shortage that requires new training facilities.[8]

Long-term solutions include policies that keep students in school and improve access to education, reorientation of our higher educational system towards specialized and vocational training and community colleges, and immigration reform.

Short-term remedies: Our current unemployment situation demands income support through unemployment insurance for those seeking but unable to find a job. Jobless spells degrade worker skills just when workers need re-training. One remedy would pair training in basic skills that are needed for work with such income support. Two other groups seeking employment — newly minted college students and unemployed teachers — could be an ideal nucleus for a Job Training Corps that would empower job seekers with new skills. As is the case with Teach for America, the Job Training Corps would build a pool of training advocates who then go on to work in other occupations with the perspective and conviction that come from helping others to acquire needed skills.[9]

Obstacle 3. Labor immobility resulting from the housing bust. America's workers have always been footloose. Even in the Great Depression, they looked for work wherever it was. Today, however, the housing difficulties I discussed earlier mean that one in four homeowners is trapped in their house, so they can't move to take another job — until they sell or walk away. Unlike in the Depression, when homeownership was less prevalent, negative equity among a nation of homeowners leads to substantially lower mobility rates. Owners suffering from negative equity are one-third less mobile according to one study.[10] The wave of "strategic defaults" and foreclosures is undermining the economic and social fabric of communities and reducing job opportunities.

Long-term solutions: Financial and mortgage regulatory reform are essential to restore the health of housing finance; much remains to be done. Significantly improving financial literacy is equally important.[11]

Short-term remedies: Local efforts to stabilize communities plagued by foreclosure are essential, but they are not enough.[12] Beyond the proposals outlined above, efforts to establish a protocol for short sales and/or principal reduction should be a useful tool in avoiding costly foreclosure and strategic default.[13]

Obstacle 4. Policy uncertainty is a negative for the economy and markets. America's long-term challenges — healthcare, budget and tax reform, financial regulatory reform, retirement saving, infrastructure, education, energy, and climate change — are not new. Solving them is imperative, and major legislation to

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[8] See Bridget M. Kuehn, "No End in Sight to Nursing Shortage: Bottleneck at Nursing Schools a Key Factor," JAMA 2007; 298:1623-1625.

[9] http://www.teachforamerica.org/mission/mission_and_approach.htm

[10] See Fernando Ferreira, Joseph Gyourko, and Joseph Tracy "Housing Busts and Household Mobility," forthcoming in the *Journal of Urban Economics.*

[11] Efforts by the Federal Reserve and others are especially encouraging. See http://www.federalreserve.gov/consumerinfo/foreclosure.htm and http://www.mymoney.gov/

[12] See http://www.stablecommunities.org/ for examples

[13] See for example, Larry Cordell, Karen Dynan, Andreas Lehnert, Nellie Liang, and Eileen Mauskopf, "Designing Loan Modifications to Address the Mortgage Crisis and the Making Home Affordable Program," Brookings Institution, October 2009.

address them represents important steps toward those ends — e.g., promoting increased access to healthcare and a safer financial system. But the uncertainty around the costs of those policy changes and the uncertain magnitude of prospective tax hikes that will be required to address our fiscal problems is weighing on business and consumer decisions to hire, expand, buy homes and spend.

Recent work confirms this intuition, underlining how uncertainty produces negative growth shocks. Nicholas Bloom shows how a rise in uncertainty makes it optimal for firms and consumers to hesitate, which results in a decline in spending, hiring and activity. In effect, the rise in uncertainty increases the option value of waiting as volatility rises. Moreover, this line of reasoning suggests that uncertainty reduces the potency of policy stimulus.[14] That's because the uncertainty can swamp the effects of lower interest rates, transfers or tax cuts. In effect, uncertainty raises the threshold that must be cleared to make a business choice worthwhile, and as uncertainty declines, the threshold falls with it. This notion squares with our long-held view that policy traction from easier monetary policy, improving financial conditions and fiscal stimulus was lacking through much of last year, but improved as uncertainty fell.

Market participants are used to thinking that political gridlock is good, that it prevents politicians from interfering with the marketplace. The financial crisis clearly exposed the flaws in that reasoning with respect to appropriate financial regulation, whose absence allowed abuses. Indeed, gridlock today is more likely to be bad for markets and for the economy, as our long-term economic problems are partly the result of past policies and can only be solved with political action.

Long-term solutions involve bipartisan leadership to tackle these complex problems one-by-one, in steps that are fair and call for shared sacrifice and benefits. That means setting priorities, making hard choices, communicating the game plan, and getting buy-in for it in advance. Mr. Chairman, Ranking Member Gregg, your work as Commissioners on the National Commission on Fiscal Responsibility and Reform is critical. I know you agree that crafting a long-term credible plan to restore fiscal sustainability will ease concerns and uncertainty about future tax hikes and the potential loss of our safety nets.

Short-term remedies: In addition, reducing policy uncertainty now could be a tonic for growth. That won't be easy or come quickly, given the political backdrop in this election year. But even some incremental clarity on policies in any of these areas would offer investors a chance to assess the fundamentals again. For example, we assume that Congress will agree to a 1-year extension of all expiring tax cuts. That should reduce uncertainty as well as sustain fiscal stimulus. Obviously, the sooner such action is implemented, the sooner the reduction in uncertainty can be achieved.

Mr. Chairman and members of the Committee, we have many challenges ahead. Our short-term challenge is to enhance the odds for a more vigorous, sustainable recovery. Our long-term challenges are to promote a sustainable fiscal policy and to reform our entitlement and other programs that represent long-term claims on our future resources. I thank you for your kind attention today and for the opportunity to offer advice. I would be happy to answer any questions you may have.

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[14] See "Policy Uncertainty Redux," June 25, 2010 and Nicholas Bloom," The Impact of Uncertainty Shocks," Econometrica, vol. 77(3), pages 623-685, 05, May 2009

Chairman CONRAD. Thank you very much, Dr. Berner.

Now we will go to Dr. Johnson, senior fellow at the Peterson Institute for International Economics, someone who has testified before this Committee before. We welcome you back. Dr. Johnson.

STATEMENT OF SIMON JOHNSON, PH.D., SENIOR FELLOW, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS AND RONALD A. KURTZ PROFESSOR OF ENTREPRENEURSHIP, SLOAN SCHOOL OF MANAGEMENT, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Mr. JOHNSON. Thank you very much, Senator.

Compared to Mr. Berner, I think I am somewhat more pessimistic about our immediate prospects. I am also much more worried about policy and our ability to put in place effective countermeasures.

I would have suggested we frame our discussion of the U.S. economy in the following rather stark terms: If you look at the latest numbers from the BEA and compare the first quarter of 2006 real GDP with the latest quarter, second quarter of 2010, real GDP has hardly changed. So we are on track, if we are pessimistic about the second half of this year, to experience essentially a lost half decade of growth in the United States. And I think this should remind us all of the lessons from Japan. I am not in the camp of thinking that we are going to enter into a Japanese-type deflation. But in terms of the damage that has been done to balance sheets, for example, of homeowners, the latest data there suggests around 20 percent of all homeowners still have negative equity, and this percentage has not declined much over the last four quarters. So the damage remains there, and I think you see this in the latest consumption data that came out today. Consumption is unlikely to rebound quickly.

Our corporates, of course, have stronger balance sheets in the United States, but my experience talking to CEOs and CFOs in the U.S. and also from global companies is that they want to be careful now, that the big shock and the massive uncertainty that everyone experienced over the last 2 years was very much about the credit system, and most corporate leaders do not want to rely on borrowing and do not want to extend themselves and hire, obviously, as much as they would have done in the past. So, again, I think this undermines and slows growth.

And, of course, on top of this we have the sovereign debt crisis and pressure toward austerity, which is most manifest in Western Europe, but we see it in other countries also. The "withdrawal of fiscal stimulus" is the term often used by the IMF now. This is prevalent around the world.

I was just recently in China, and talking to some of the leading economists there, I was struck that they are the least bullish economists on China that I meet anywhere in the world. They were very much about the need for cutting back on their expansion programs. They were very worried about the waste of Government funds in infrastructure, and I can share more details with your staff if you are interested.

My bottom line is that I think global growth on a fourth-quarter-over-fourth-quarter basis—I think Mr. Berner's data were annual averages, but I am using Q4 over Q4. I think the global economy will struggle to break 4 percent this year. I think next year should be a little bit better. I am not calling at all for stagnation, but I think slow growth is going to be with us for a while, both globally and in the United States.

The second point I would like to make is that while I completely agree with what both you, Senator Conrad, and you, Senator Gregg, said at the beginning about our longer-term fiscal issues—and, of course, the very careful and excellent analysis done by the Congressional Budget Office on these issues—I am very concerned that a major fiscal issue is completely missing from this discussion. This is the contingent liabilities created by our financial sector and the risks that, in my opinion and in the opinion of many, are caused by the continued existence of undercapitalized banks that have an incentive to take very big risks and that are, in the language that some people like, "too big to fail."

And this is a problem, obviously, in the United States. It is not unique to the United States. We will see it in Western Europe. But it is a very big fiscal issue in the U.S., and you can see this again from the CBO's numbers. Compare the baseline that they put out in January of this year with the January 2008 numbers, and look at the projected debt level, net debt as a percent of GDP for 2018. It is 40 percentage points of GDP higher now than it was in the 2008 projection, and you can decompose that increase in debt. You can see where the deficit comes from. It is mostly from the lost tax revenue due to the recession. There is a small part, about 17 percent, that comes from the discretionary fiscal stimulus, which I am sure we will have a discussion about. But with or without that discretionary stimulus, you still would have had a massive hit to the budget and to the debt from the lost tax revenue and, of course, the increased interest payments on top of the debt because the debt has increased. And this is assuming a low rate of interest.

If the more difficult fiscal scenarios that you, Senator Conrad and Senator Gregg, were outlining in the beginning start to play out, we should expect an increase in long-term interest rates, which presumably will increase the debt even further.

Now, we can obviously have a discussion about the extent to which the Dodd-Frank legislation has addressed these risks. I think it was a step in the right direction but did not go far enough. But surely we will agree, I think, in that discussion that these risks have not gone to zero, and the CBO's methodology consistently across different kinds of problems, whether or not they are demographic or, for example, the way they treat the U.S.' commitment to the International Monetary Fund, which is essentially a line of credit, and we actually spend money out of the budget only with some hopefully low probability. There is a budget scoring for that, and I think the two of you were leaders in insisting that the CBO score that appropriately.

Well, we are not scoring in the budget, according to the CBO methodology, and I think as discussed by Congress, in any way a contingent liability, the damage to the Government budget that would arise from a future financial crisis.

Now, we can, of course, argue about how frequently those crises occur, but leading people in the financial sector, including Mr.

Dimon, the head of JPMorgan Chase, and Mr. Paulson, former Secretary of the Treasury and former head of Goldman Sachs, say these crises occur on a 3- to 7-year time horizon. So this is all within your short- to medium-term framework, Senator Conrad, and that is why I worry that many of Mr. Berner's ideas, which are very sensible ideas taken individually, if I look at them together and consider that alongside this danger to the budget coming from the short term, I am very concerned about our scope for action.

I do completely agree, I think, with all of you that over the longer term we must act, and the good news there, compared to other countries—and I was formerly chief economist at the IMF, so I look at these numbers very much in a comparative framework, including the Greek numbers, Senator Gregg, which I have right here if you are interested. My point would be there is some good news, which is that we have plenty of capacity for tax reform in the United States. Our tax system is relatively antiquated. It could be modernized fairly easily. I have some proposals in here. Many of the best ideas come from Greg Mankiw, former head of the Council of Economic Advisers under President George W. Bush. I see the beginnings of a bipartisan consensus at the technical level on tax reform issues that will, I think, generate somewhat more revenue than Senator Gregg was anticipating if we look out beyond a decade.

Medicare, though, remains a huge problem, and I think that is the most difficult issue, and I think that is much more about ethics and about arithmetic than it is about economics, because the question of how much you are willing to pay for people who are relatively late in life is a very difficult and obviously emotional question. On that I agree the conversation has not moved forward very much over the past 2 years.

The good news, though, is we do not face imminent fiscal crisis. We have time to make those decisions. We should deal with them now, as you gentlemen are already doing, and we should also deal with this issue of the contingent liabilities posed by, unfortunately, a still dangerous financial sector in this country.

Thank you very much.

[The prepared statement of Mr. Johnson follows:]

Testimony to Senate Budget Committee, hearing on "A Status Report on the U.S. Economy", 10am Tuesday, August 3rd (embargoed until the hearing starts).

Submitted by Simon Johnson, Ronald Kurtz Professor of Entrepreneurship, MIT Sloan School of Management; Senior Fellow, Peterson Institute for International Economics; and co-founder of http://BaselineScenario.com.[1]

A. Short-term Prospects

1) The global economy continues to improve, although at a disappointing pace. Sharp recessions traditionally produce rapid recoveries, but the damage wrought by the disruption of global credit in fall 2008 is far in excess of anything we have seen since the 1930s. This could be the slowest recovery of the post-war period.[2]

2) Global growth, Q4-on-Q4, as measured by the International Monetary Fund was 3 percent in 2008 and, based on the latest revisions, will be probably prove to have been under 2 percent in 2009 – the worst performance since World War II. This same measure of growth around the world, which uses purchasing power parity weights, is likely to be somewhat under 4 percent for 2010 but should pick up in 2011.

3) The major risk faced by the world economy is not stagnation year-in and year-out, but rather an unstable credit cycle that produces apparent "growth" – perhaps even high recorded growth – in some years for the United States, but then leads to financial crisis, repeated recession, and very little by way of sustained growth. US GDP in real terms is currently at about the same level now as it was in 2006. (Real GDP, annualized, was around $12.9 trillion in the first quarter of 2006 and $13.2 trillion in the second quarter of 2010; see Table 3B in the July 2010 BEA report).[3]

4) Japan's lost decade in the 1990s was not a sequence of years with zero growth – there were notable expansions and contractions, with high rates of growth in particular quarters and even some years when it seemed that the corner had been turned. Lost decades are evident only in retrospect. The US is currently on track for "losing" at least half a decade of growth (from the beginning of 2006 through the end of 2010).

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[1] This testimony draws on joint work with James Kwak, including *13 Bankers: The Wall Street Takeover and The Next Financial Meltdown* (Pantheon, March 2010) and "The Quiet Coup" (*The Atlantic*, April, 2009), and Peter Boone, including "The Next Financial Crisis: It's Coming and We Just Made It Worse" (*The New Republic*, September 8, 2009) and "Will the Politics of Moral Hazard Sink Us Again" (Chapter 10, in The Future of Finance, July 2010). Underlined text indicates links to supplementary material; to see this, please access an electronic version of this document, e.g., at http://BaselineScenario.com, where we also provide daily updates and detailed policy assessments for the global economy.

[2] The current recovery is definitely slower than what followed the severe recessions of 1973-75 and 1981-82. Based on actual performance so far and projected growth through end of 2011 from a range of forecasters, the recovery of 2009-2011 might prove a little stronger than the recoveries experienced after the mild recessions of 1990-91 and 2001. See Mike Mussa's influential work for more discussion (April 2009; April 2010 versions); his latest global GDP forecast is 4.5 percent (using the same definition for global GDP as the IMF).

[3] Details of the advance US GDP estimate for the second quarter of 2010 are from the BEA website. This estimate is notoriously noisy and prone to revision.

5) The latest iteration of the unstable global credit cycle has done lasting damage to the United States. This is manifest in the following ways:

a) Long-term unemployment results in skill losses and lower productivity in the future. This undermines future growth prospects and it may shift up the "natural" rate of unemployment. So-called hysteresis in unemployment – meaning that it goes up fast but comes down slowly and not fully – has very much been a feature in the experience of other industrialized countries during recent decades. This is potentially now a major issue for the United States.

b) The credit disruption of 2008-09 is having a persistent impact on hiring decisions in the United States and Europe. Business equipment spending is recovering fast but firms are reluctant to add workers. Most of this uncertainty is due to firms not knowing if they will have consistent access to external financing. As a result, large nonfinancial firms are likely to carry less debt and more cash.

c) The damage to household balance sheets from the boom-bust in real estate will also likely persist; for example, the percent of homeowners with negative equity has stabilized, around 20 percent, but moved down only slightly over the past year. We should expect US households to save move as consequence and the personal savings rate is now around 6 percent of personal disposable income (compared with 3 percent during the early 2000s and closer to 2 percent in the run up to the crisis). This is a pattern we have seen in "balance sheet"-related recessions elsewhere.

d) There is a serious sovereign debt crisis in Europe. While the prospect of default by a eurozone country is not imminent, there is a shift to fiscal austerity across that continent, thus slowing growth further. Structural issues within the eurozone are unlikely to be resolved quickly, thus weakening the euro and limiting the potential for US exports. Resulting financial market instability can also still spread quickly to the US.

e) The financial crisis and its aftermath damaged US prestige and capacity for leadership around the world.

6) It is hard to provide effective stimulus to the US economy in this situation. The longer term budget needs credible consolidation, which is mostly about reforming Medicare and implementing meaningful tax reform (see section C below). These are not difficult in technical terms but the potential for a political impasse threatens long-term interest rates – depending on exactly how the post-crisis adjustment process plays out in other major economies, as this affects relative demand for US government debt. Over the shorter term – i.e., the next decade or so – high levels of systemic risk in the financial sector continue to generate large contingent fiscal liabilities (section B below).

B. Contingent Liabilities from the Financial Sector

1) The scale and severity of the recent recession was due to the nature of excessive risk-taking at the heart of the world's financial system, in the United States and Western Europe.[4]

2) A series of efforts are underway to change the behavior of major global banks and to prevent them from loading up on risks during the next cycle. These are unlikely to succeed. As Jamie

[4] We cover this issue in detail in *13 Bankers*.

Dimon, CEO of JP Morgan Chase remarked in January 2010, "[a financial crisis is] the type of thing that happens every five, ten, seven, years" – and another crisis within that time frame should not surprise us.[5]

3) To see the fiscal impact of the finance-induced recession, look at changes in the CBO's baseline projections over time. In January 2008, the CBO projected that total government debt in private hands—the best measure of what the government owes—would fall to $5.1 trillion by 2018 (23% of GDP). As of January 2010, the CBO now projects that over the next eight years debt will rise to $13.7 trillion (over 65% of GDP)—a difference of $8.6 trillion.

4) Most of this fiscal impact is not due to the Troubled Assets Relief Program – and definitely not due to the part of that program which injected capital into failing banks. Of the change in CBO baseline, 57% is due to decreased tax revenues resulting from the financial crisis and recession; 17% is due to increases in discretionary spending, much of it the stimulus package necessitated by the financial crisis; and another 14% is due to increased interest payments on the debt – because we now have more debt.[6]

5) In effect, a dangerous financial system – prone to major collapses – creates a hidden contingent liability for the federal budget in the United States.

6) The Dodd-Frank financial reforms of 2010 are a modest step towards making the financial system safer, but these are unlikely to solve the problem of systemic risk. By all accounts, the internationally coordinated process of raising capital standards – and thus creating greater shareholder buffers against losses – is not making much progress; there will be little real change, much delay in implementation, and far too much "low quality" capital at the end of the day.[7]

7) As long as massive financial institutions continue to take on huge amounts of risk, there remains a strong possibility that governments in the US and other countries will once again face unexpected liabilities and collapsing tax revenues in a financial crisis – pushing up debt by another 40% or so of GDP.

8) Discussion of this risk was largely absent from the recent debate on financial reform and is not currently quantified by the Congressional Budget Office.[8]

9) In this regard, the IMF's first ever detailed assessment of the US financial sector (known as a FSAP), released last week, is not reassuring. Our financial system remains undercapitalized, according to the – rather mild – stress tests reported there. The veiled warning in this report is

[5] In his memoir, Hank Paulson makes a statement about the frequency of crises very much along the lines of Mr. Dimon. Larry Summers, in his 2000 Ely Lecture to the American Economic Association, uses similar language.

[6] See also the May 2010 edition of the IMF's cross-country fiscal monitor for comparable data from other industrialized countries, http://www.imf.org/external/pubs/ft/fm/2010/fm1001.pdf. The box on debt dynamics shows that mostly these are due to the recession; fiscal stimulus only accounts for 1/10 of the increase in debt in advanced G20 countries. Table 4 in that report compares support by the government for the financial sector across leading countries; the US provided more capital injection (as a percent of GDP) but lower guarantees relative to Europe.

[7] For a broader discussion of capital requirements and the state of play in the Basel III negotiations, see http://baselinescenario.com/2010/07/29/required-intellectual-capital/.

[8] The CBO routinely assesses the budget impact of other contingent liabilities, including future health care costs and the likely cost of US commitments to the International Monetary Fund.

that the US faces severe fiscal risks going forward, arising directly from our continued inability to rein in the dangers posed by the financial sector.

C. Risks of a Fiscal Crisis

1) Seen in a comparative perspective, our budget issues are serious but not severe and – relative to other industrialized countries currently under pressure – we have plenty of time to deal with them. Fears of an immediate budget crisis in the United States should not be exaggerated, although we do need fiscal consolidation over the next decade – a combination of tax reform and changes to future Medicare spending.

2) Most other industrialized countries also have to engage in a process of fiscal adjustment and for similar reasons.[9] Compared with other countries at roughly our income level and with similar demographics, the United States has a major advantage in the sense that we collect relatively little in taxes; in addition, our tax system is relatively antiquated and would benefit from modernization. Using the IMF's numbers – which are for "general government" (i.e., the entire government sector, including federal, state, and local) – the US collected 31.8 percent of GDP in 2000 (compared with the UK at 38 percent, Germany at 46 percent, and France at 50 percent).[10] In both 2009 and 2010 the US collected 30.4 percent of GDP; over the cycle, our revenue relative to other leading industrialized countries remains about the same.

3) Under the CBO's "alternative fiscal scenario," which includes policy changes that are politically likely, government debt in private hands will grow to 185 percent of GDP by 2035 as Social Security, Medicare, Medicaid, and other health care programs grow to consume almost all tax revenues. This should not be a surprise: in 2000, the CBO already projected that these programs would grow to over 16 percent of GDP by 2040—a figure virtually identical to current estimates. This was predictable because it rested on two simple trends: changing demographics and, more importantly, high health care cost inflation.

4) For some commentators, the only possible response for the US is immediate austerity; this is the course being taken in the United Kingdom and parts of the Eurozone. If we continue to spend, the argument goes, markets will lose faith in our ability to repay our debts, interest rates will skyrocket, the dollar will collapse, and our way of life will be at an end. While this argument is plausible in the abstract, there is no reason for panic or precipitate action *now*.

5) The US Treasury Department can currently borrow money at historically *low* interest rates. Investors around the world like saving in a safe currency, the dollar has traditionally been seen as the safest of currencies, and recent developments in Europe and the rest of the world have done nothing to change that.

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[9] See Table 6 in the IMF's May 2010 Fiscal Monitor for budget deficit financing needs across advanced countries (http://www.imf.org/external/pubs/ft/fm/2010/fm1001.pdf). The US has relatively short maturity debt (4.4 years by this measure), but it is broadly comparable with other industrialized nations on this and other deficit measures. Table 11 in the same report provides estimates of effects from raising revenue in various sources across the advanced G20 economies. Again, the US is in the middle of the pack – there is nothing unusually difficult (on paper) about the adjustment required.

[10] Statistical table 5 in the IMF's May 2010 Fiscal Monitor has general government revenue as a percent of GDP since 2000 and forecast through 2015.

6) It is true that markets can suddenly lose confidence in a country, with severe economic repercussions. But there is no magical threshold that suddenly makes a country a poor credit risk; Japan's net government debt relative to its economy is roughly at Greek levels, yet Japan can still borrow money cheaply. A country's ability to borrow is determined by its economic fundamentals, its position in the international economy, and the credibility of its political system – relative to other systems.

7) While an extra dollar of spending today is an extra dollar (plus interest) of debt later, what really matters are policies that affect taxes or spending year after year. By contrast, $34 billion for extended unemployment benefits—a temporary program that will become smaller as unemployment falls—has no appreciable impact on our structural deficit.

8) The things that do matter are taxes and entitlements. Therefore, the upcoming debate over the Bush tax cuts is of real importance. According to the CBO, extending the Bush tax cuts would add $2.3 trillion to the total 2018 debt. The single biggest step our government could take this year to address our structural deficit would be to let the tax cuts expire. Such a credible commitment to fiscal consolidation should reduce interest rates today, helping to stimulate the economy.

9) Critics say that this amounts to increasing taxes at a time of high unemployment, and instead the tax cuts should be extended as a stimulus measure. This overlooks the fact that tax cuts are an inefficient form of stimulus, because many people choose to save their additional income instead of spending it. If the goal is to boost growth and employment immediately, it would be better to let the tax cuts expire and dedicate some of the increased revenue to real stimulus programs. Alternatively, if some tax cuts are extended, there should be provisions to eliminate them automatically when unemployment falls to a preset level.

10) Complete elimination of the Bush tax cuts is highly improbable. The most likely outcome is that the tax cuts will be extended for families making less than $250,000 per year.

11) Additional tax revenues will also be necessary in the medium term, and at least three plausible ideas are on the table.

a) The first is comprehensive tax reform, to better align our tax policy with desirable economic incentives. We should consider the value-added tax (VAT) favored by Greg Mankiw (former chair of the Council of Economic Advisers under President George W. Bush), among others. A VAT is a tax on consumption, and therefore could reduce the overconsumption that helped feed the recent credit bubble, encouraging savings and investment instead. Although a simple VAT is regressive, it can be made progressive by combining it with a partial rebate or by exempting necessities. Also, as Martin Feldstein and Len Burman have suggested, we should look hard at tax breaks that act like hidden spending programs. One place to start is the mortgage interest tax deduction, currently available on mortgages up to $1 million, which is part of our excessive package of incentives to buy houses—a policy eschewed by most other industrialized countries.

b) The second is carbon pricing, whether auctioning emissions allocations or taxing carbon directly, at rates that start low and rise over the next decades. Politically speaking, it would be easier to pass a carbon pricing bill by rebating the proceeds back to households (or handing them to energy companies in exchange for political support). But given the large potential revenues from carbon pricing, it would make sense to dedicate a portion to cushion the impact of higher energy prices on the poor, while applying the rest to our fiscal balance.

c) The third is a tax on the financial sector, in the form of a Financial Activities Tax on big banks that enjoy implicit government guarantees. This tax would aim to eliminate the funding advantage that large banks enjoy over their smaller competitors and limit the incentive for big banks to become even bigger. As the International Monetary Fund has argued, across the G20 this would help constrain the worst features of our financial system and reduce the competitive distortions created by the megabanks.

12) After taxes, there is the issue of entitlements—which is mainly an issue of health care costs. According to the CBO's alternative fiscal scenario, growth in Social Security is comparatively modest, from 4.8 percent of GDP in 2010 to 6.2 percent in 2035. A relatively small change in the parameters of this program could lower its future costs, as was done in the 1980s. At the same time, however, Medicare, Medicaid, and other health care programs will more than double from 4.5 percent to 10.9 percent of GDP.

13) There are two ways to reduce the government's health care outlays: reduce the *amount* of health care the government buys or reduce the *cost* of health care. The simplest solution is to mandate that the government buy less health care—by raising the eligibility age for Medicare, capping benefits for high-income beneficiaries, etc. The problem with this approach, however, is that Medicare is not particularly generous to begin with (hence the market for Medigap supplemental policies). In addition, the rest of the nation's health care system is also in sorry straits; if Medicare were to increase its eligibility age, it would simply push people back onto their employers, resulting in higher health care costs for all working people.

14) In other words, cutting Medicare expenses shifts costs from the government onto individuals, many of whom will simply go without decent health care. If we fail in our attempts to control health care cost inflation, this may be the only option. But the better solution is to figure out how to reduce health care costs.

15) A top priority should be to preserve and expand the cost-cutting provisions in this year's Affordable Care Act (ACA). Another obvious step to consider is phasing out the tax exclusion for employer-sponsored health plans, which will not only increase revenue but also end the distorting effects of employer subsidization of health care.

16) Reshaping our health care system to focus on successful outcomes and quality of life, rather than on employing the newest and most expensive technology, is a challenge for which no one yet has a proven solution. But it remains, more than any other single factor, the key to long-term fiscal sustainability.

17) Fixing our long-term fiscal problems will not be easy. But there is no need to panic. And there is no shortage of possible solutions.

Chairman CONRAD. Thank you, Dr. Johnson.

Now I will go to Dr. Naroff. Again, welcome to the Committee. Please proceed with your testimony.

STATEMENT OF JOEL L. NAROFF, PH.D., PRESIDENT AND FOUNDER, NAROFF ECONOMIC ADVISORS, INC.

Mr. NAROFF. Thank you, Chairman Conrad, Senator Gregg, members of the Senate Budget Committee. Thank you for the opportunity to discuss my views on the status of the economy and to provide some ideas on the direction that fiscal policy should take.

The good news is that we have had one full year of economic growth, and the economy did expand by about 3.2 percent, which is pretty impressive given the problems that we faced over this period of time. Consumers have started spending again, though instead of "shopping 'til they drop," they are really "shopping 'til they are tired" at this point. Business investment, which had collapsed during the recession, has made a strong comeback. Exports are solid, inventories are being rebuilt, and workers are being rehired. All these factors indicate, at least to me, that the recession is over.

However, I am in the camp that is extremely concerned about growth over the next year. I believe that the economy, as Dick Berner said, will face a significant number of significant headwinds and that the damage done from the bursting of both the housing bubble and the near collapse of the international financial system cannot be cured in a relatively short period of time.

While the banking industry is better, it is hardly in good condition. Bank failures this year are running at twice last year's pace. Larger institutions are concentrating on rebuilding capital, not adding to their loan books. Credit, while slowly becoming more available, is still very limited.

Bankers like to say that they are not turning down good loans. They are correct. But the devil is in the definition of a "good loan." Credit decisions require reviewing in the past few years of corporate financials, and since many firms had to deal with that kind of economy, not many had stellar results over that period. Therefore, good credit risks are very hard to find.

Unless the expansion is stronger than I expect, credit standards may not ease significantly for at least another 12 to 18 months. And given that the economy runs on credit, it is hard to see how growth could surge. The housing sector will also continue to restrain activity, possibly through 2011.

There are too many challenges to overcome. First, it is "back to the future" when it comes to mortgage credit standards. The days of "no docs" and little or nothing down are over, thankfully. But that means fewer people will qualify for mortgages.

But maybe more important is the loss of equity many homeowners have suffered, and that has been discussed a lot here. But the point in terms of housing demand is that, without rebuilding that equity, a smaller number of households are actually going to have the ability to make downpayments on additional homes, and without being able to do that, they are not going to be able to move.

The diminution of demand is but one factor in the dismal forecast for new residential construction. There is also the foreclosure crisis. Foreclosures are greatest in those parts of the country where construction has typically been strongest: California, Arizona, Nevada, and Florida. As long as builders face the competition of large numbers of relatively low-priced foreclosed units, new construction activity will be limited.

The weak home construction recovery is especially worrisome because in previous upturns housing either led the recovery or within one quarter was once again growing robustly, often in double-digit rates. I do not expect that to happen now.

So, where can growth come from? Normally, we look toward the consumer, who makes up about two-thirds of the economy. Indeed, except for the 2001 recession and recovery, consumers returned to the malls early, after the downturn ended. This time the upturn in consumption is being delayed.

There are good reasons for households to be cautious and consumer confidence to be depressed. Two decades ago, workers believed that if they did well, their positions were safe. They defined "job security" as the ability to work for one firm possibly for their entire careers.

But businesses learned that in a globalized economy, productivity and cost containment are critical to long-term survival, and workers are, unfortunately, largely overhead. The employment compact between businesses and workers was broken.

What has replaced this relationship? Several years ago I argued we should redefine "job security" as the ability to walk across the street and get another job." In other words, job security is having a robust job market. People will feel comfortable about their economic situation when they can sell their labor easily and not feel they are stuck in their current position or with their current employer.

This new definition has critical implications. Since labor is the largest expense for businesses, there must be tight controls over payrolls. You do that by limiting hiring and wage gains. In the early part of the recovery, that strategy allows profits to rise. The combination of modest payroll gains and rising earnings, though, has created a disconnect between Main Street and Wall Street.

Firms will remain hesitant to hire until they believe the economy will expand strongly for an extended period of time. That creates a troubling cycle. If companies limit hiring, then workers, who define job security as the ability to get a new job, will be worried, and consumer confidence will remain low. And depressed workers do not usually spend lavishly.

The cycle of sluggish spending and limited private sector job creation will be broken, but not until the expansion lengthens, becomes broader-based, and corporate balance sheets improve. Payrolls should continue rising as they have this year, but the increases are not likely to be large enough to rapidly reduce the unemployment rate.

It should not be a surprise that we are having a jobless recovery. The reality is that the last couple of recoveries and most future recoveries will be defined by slow job growth. The perception that upturns lead to an immediate surge in jobs is an anachronism, popularized when we were a largely manufacturing economy. The massive industrial sector that created lots of jobs early in the recovery by rapidly ramping up output and hiring is history. And as we saw with the latest GDP report, when our economy expands, we feed the growing economic needs with products not only from U.S. companies but with good produced around the world. We should stop using the phrase "jobless recovery" because it is normal that recoveries begin with anemic job growth.

With employment and income growth modest and consumers uncertain, it is not a great leap to expect only moderate consumption growth over the next year. It should be enough to keep the economy going, but that is about all.

If consumers are not spending lavishly, can business investment remain robust? Spending for software and equipment soared over the past three quarters. However, that too may change.

From the summer of 2008 through the spring of 2009, firms dramatically reduced capital spending. More recently, businesses have started making up for the failure to invest in capital required to remain competitive and on depreciation. But that activity is just infilling delayed investments. Once that process is completed, firms will invest only when they believe their returns warrant the costs.

Currently, it is hard to rationalize major new purchases of software, equipment, or structures if the economy is not expected to grow solidly. Uncertainty about tax policy is not helping either. As a consequence, investment could be limited to replacement and competitive factors. All this argues for decent but not spectacular gains in capital spending.

Similarly, the inventory rebuilding that added greatly to GDP growth is likely over. In 2009, firms reduced inventories at a breathtaking but excessive pace. This year, they have been refilling their empty warehouses. Once more reasonable levels are reached, firms will need only to replace depleted stocks rather than refill emptied shelves.

Can exports save the day? Yes, there have been strong gains in exports, and that should continue. However, as the recovery continues, imports will also grow faster. And I expect the trade deficit to widen further, and that will restrain growth.

So let me summarize. We are facing a lack of credit, a stuck-in-the-mud housing market, an uncertain and cautious consumer, a wary business community that has already largely restocked empty warehouses, infilled depleted work forces, and replaced depreciated equipment and software, as well as a widening trade gap. And I have not even talked about the State and local governments that are cutting back dramatically.

Without changes in fiscal or monetary policy, my forecast next year for growth is in the 2- to 2.5-percent range. This may appear to be modest, but we should not compare the pace with the past two decades when strong growth was closer to 3.75 percent. Over the past 20 years, the economy was hyped by the 1990's tech bubble and the 2000's housing bubble. Massive and excessive amounts of resources flowed to those sectors, creating outsized growth rates. Without another bubble, more moderate growth is likely, so do not evaluate this recovery on the basis of two artificial bubble-hyped expansions. Instead, look at what is now possible and, that is, a slow but steady recovery.

It is in this context of a badly weakened, slowly recovering economy that the structure of fiscal policy must be determined. While monetary policy is always evaluated on the basis of where we are in the business cycle, fiscal policy seems to be viewed in a vacuum. Fiscal policies are often proposed as if the impacts are the same regardless of the condition of businesses, households, or even the Federal budget deficit.

I believe that policies intended to grow the economy should always be evaluated on the basis of whether they makes sense in the context of the current economic circumstances and where we are in the business cycle. Tax cuts should not be implemented—or should be implemented and retained only to the extent that they produce new growth and set the stage for further economic activity. Spending increases should be implemented only if they can quickly and efficiently increase domestic demand.

We are moving from an economy that lacked demand to one where demand is growing slowly. We need to take that to the next level where businesses expand sharply, that implies phasing in the schedule of policies that meet the changing economic conditions.

Thank you for your time.

[The prepared statement of Mr. Naroff follows:]

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"Status of the U. S. Economy"

Economic Outlook

Chairman Conrad, Senator Gregg, members of the Senate Budget Committee. Thank you for the opportunity to discuss my views on the current status of the economy, where we may be going over the next year and also provide some thoughts about the role fiscal policy might play in the recovery.

The good news is that we have had one full year of economic growth. Over that time, the economy has expanded by 3.2%, a very impressive performance given the problems the economy faced. Consumers have started spending again, though they are not "shopping 'till they drop". Maybe it is better described as "shopping 'till they're tired". Business investment, which had collapsed during the recession, has made a strong comeback. Exports are also solid as the generally weaker dollar has helped our competitiveness overseas. All of these factors tell me that the recession is over.

Unfortunately, my outlook for the next year is very cautious. Indeed, that has been my view this entire year. Early last fall, I warned that we should watch for what I called "the head fake". Growth would probably accelerate, but the sharp upturn would likely be the result of temporary factors and as a consequence, it might not be sustainable. Already we are seeing signs of fraying around the edges, if not the core, of the recovery.

Indeed, it was unrealistic to expect a strong, "V-shaped" recovery. The economy was, still is, and will continue to face a number of significant headwinds that will restrain growth. First and foremost, the enormous damage done to the economy by the bursting of the housing bubble and the near collapse of the international financial system continues to weight on the economy because it is not something that could be cured in a short period of time.

While the banking industry is better, it is far from being in good condition. Bank failures this year are running at twice the pace they were last year. Larger institutions are concentrating on rebuilding capital not adding to their loan books. As a result, credit, while more available today than one year ago, is still limited.

In part, tight credit is the result of having gone through the worst recession since the Great Depression. Bankers like to say that they are not turning down good loans. Technically, that is correct. But the devil is in the details of what constitutes a "good loan". Credit reviews require looking back at the past few years of corporate financials.

Since that encompasses most of the recession, not many firms would have had stellar results over that period of time. Not surprisingly, then, it has been hard for financial institutions to find what they are defining as really good credit risks.

In addition, there is the reality that financial institutions, as they always do, have tightened standards. As the recent Federal Reserve's Quarterly Senior Loan Officer survey shows, those requirements have not been modified. Unless growth turns out to be stronger than I expect, there may be no significant easing for at least twelve to eighteen months. Since the economy runs on credit, this major headwind, limited credit availability means the growth potential is reduced.

The second element of the economic crash was the bursting of the housing bubble. This not only took down the home construction sector but was also the key factor in the collapse of so many of our major financial institutions. I do not believe that housing will play a major role in growth for the remainder of 2010 or even most of 2011.

This is a concern because in previous upturns housing either led the recovery or within one quarter was once again growing robustly, often by double-digit rates. This is not likely to happen because of a number of factors. First, it is "back to the future" when it comes to mortgage credit standards. The days of "no docs" and little or nothing down are over, thankfully. But that also means fewer people will qualify for mortgages.

But maybe more important is the loss of equity that many homeowners have suffered. The housing market gets its vibrancy from people trading up - or down. Until equity is rebuilt, a smaller number of households will be able to meet the down payment requirements. Each time a homeowner cannot sell their home, take the equity and buy a new house, at least two sales are lost.

This diminution of demand is but one factor in the dismal forecast for new residential construction. There is also the foreclosure crisis. Foreclosures are greatest in those parts of the country where construction has typically been the strongest: California, Arizona, Nevada and Florida. As long as builders face the competition of a large number of low priced foreclosed units, new construction activity will be limited.

So, where can growth come from? Consumer spending makes up roughly seventy percent of the economy and it is the place where we always look first. Indeed, except for the recovery after the 2001 recession, consumers normally started hitting the malls pretty hard early in the upturn. That is not the pattern we should expect to see in this current recovery.

The most significant factor is the surprisingly depressed level of consumer confidence. However, there are very good reasons why consumers should be cautious about their economic situations.

When it comes to confidence, at least as it translates into consumer spending, we need to watch closely the perception of the labor market and job availability. This relationship has become increasingly more critical over the past twenty years.

Two decades ago, workers believed that if they did well, they could keep working for the same company. They defined job security as "the ability to work for one firm possibly for their entire career".

But businesses have learned that in a globalized economy, productivity and cost controls are critical to long term survival and workers are, unfortunately, largely overhead. Divisions are cut when the product line becomes less valuable, segments are outsourced or sold off and/or production is off shored. The employment compact between businesses and workers was broken and both groups now recognize that clearly.

What has replaced this relationship? Several years ago I argued that we should define job security as "the ability to walk across the street and get another job". Essentially, people will feel comfortable about their economic situation when they can sell their labor easily and not feel they are stuck in their current position or at the current employer.

This new definition has critical implications. In a slow growth environment pricing power is largely non-existent. Businesses operate as efficiently as possible and at the lowest cost. Since labor is the largest expense for businesses, there must be tight controls over payrolls. You do that by limiting both hiring and wage increases. In the early part of the recovery that strategy allows profits to rise and firms to rebuild their balance sheets, a necessity given the depth of the downturn. But the solid earnings gains, created in part by limited payroll increases, are the basis for what is being described as the disconnect between Main Street and Wall Street.

Firms will continue to be hesitant to hire until they believe the economy is going to grow strongly and for an extended period. But that creates a troubling cycle. If companies limit hiring, then workers, who define job security as the ability to get a new job, are going to be troubled. We should not be surprised that consumer confidence is at recession levels. To the average person, it is job opportunities that matter and without them, they will not be very optimistic.

A depressed worker is not someone who will spend lavishly. There is a lot of debate about the value of consumer confidence surveys. Clearly, we shouldn't follow the month to month movements but only the trend. Even then, it is important to understand the reason for any changes in the outlook. I watch the confidence indices carefully when I believe they are being driven by fundamental household financial reasons, and jobs, job security and potential income gains are those key factors.

The implication is that slow job growth, which begets uncertain households, will lead to cautious spending. That is what we have right now and there is little reason to believe that will change before the end of the year, at the earliest. And the sluggish spending will limit private sector job creation. Payrolls should continue to rise, as they have all this year, but the increases are not likely to be large enough to rapidly reduce the unemployment rate.

Speaking of the unemployment rate, don't be surprised if it ticks back up. Actually, I am looking forward to that time. If the expected upturn in the unemployment rate is due to a rise in the labor force, that would be good news. It would say that people are becoming more confident about the economy and they believe they can actually find a job. Unfortunately, it will take time for most to actually do that, so the rate will rise.

Does that mean we are having a so-called jobless recovery? The reality is that the last couple of recoveries and more than likely most future recoveries will be defined by slow job growth. The idea that recoveries lead to an immediate surge in jobs is an anachronism. It is a myth born when we were a largely manufacturing economy.

In the first four decades after World War II, as the recession progressed and inventories surged, industrial companies dramatically slowed production and furloughed large segments of their workforce. Once they discovered the recovery was under way, their inventories had fallen too far and they were forced to rehire rapidly and robustly.

The industrial economy that created lots of jobs early in a recovery in order to provide the bulk of goods and services to the suddenly expanding economy is largely history. As we saw with the latest GDP report, when the economy recovers, we feed the growing economic needs not simply with goods from domestic companies but with products from around the world. That is the downside of offshoring our industrial capacity. It may have led to lower consumer and industrial goods costs in the United States but it also means that few people will be called back to work quickly. Those workers are being hired elsewhere.

Since it is normal that recoveries begin with anemic job growth I believe we should stop using the phrase "jobless recovery" and assume that all recoveries start with modest job growth.

With job and income growth modest and consumers uncertain, the forecast for the rest of this year and into next year is for moderate consumption. It will be enough to keep the economy going, but clearly not enough to make anyone exuberant.

If consumers are not spending lavishly, can business investment remain robust? Investment in software and equipment soared at the end of 2009 and during the first half of this year. But I again suggest we read these data with caution.

From the summer of 2008 through the spring of 2009, firms dramatically cut back their capital spending. More recently, businesses have started making up for the failure to invest in capital equipment needed to remain competitive and on assets that depreciated. But that is just infilling delayed investments. Once that process is completed, firms will invest further only when they believe their returns will warrant the costs.

Right now, it is not costs that may be restraining investment; it is perceived returns. It is hard to rationalized major new purchases of software, equipment or structures if the economy is not expected to grow solidly. Uncertainty about tax policy is not helping either. As a consequence, investment may be limited to replacement and competitive factors. All this argues for solid but not spectacular gains in capital spending.

Similarly, the inventory rebuilding that added greatly to GDP growth is likely over. In 2009, firms reduced inventories in a breathtaking but excessive manner. This year, they have been refilling those empty warehouses. Once more reasonable levels are reached, firms will need only to replace depleted stocks rather than refill emptied shelves. That transition is already under way as second quarter inventory building added less to growth and it will likely become an insignificant factor by the end of the year.

So far, my forecast of a modest recovery is based on the lack of credit, a stuck in the mud housing market, an uncertain and cautious consumer and a wary business community that has largely restocked emptied warehouses, infilled depleted workforces and replaced deteriorated critical equipment and software. That leaves only three other places to get strong growth: Exports, fiscal policy or monetary policy.

The generally weak dollar, which strengthened during the European crisis, is likely to continue to decline slowly over time. This will allow for the strong gains in exports to continue. However, the sector is not large enough to carry the economy by itself. In addition, as the recovery progresses, imports will grow faster. Thus, I expect the trade deficit to widen and that will restrain growth going forward.

Without any changes in fiscal or monetary policy, my forecast for the next year is for growth to be in the 2% to 2.5% range. This may appear to be weak but we have to judge the pace not on the basis of the past two decades, when growth closer to 3.75% rate was considered to be strong. Those were artificial periods of growth.

Over the past twenty years the economy was hyped by two huge bubbles: In the 1990s there was the dot.com/tech bubble and in the last decade there was the housing bubble. A lot of critical resources flowed to these sectors and while that helped power the strong growth pace we experienced, it did not create lasting value commensurate with the expenditures. The long term growth pathway of the economy was likely slowed, at least for a period of time, as capital was clearly misallocated. Unless we have future bubbles, that extra growth is not likely to appear. So don't evaluate this recovery on the basis of two artificial, bubble-hyped expansions.

On top of that we must add the reality that fully repairing the damage from the collapse of the housing and financial sectors will not be accomplished in a year or two. Stabilizing the economy and jump starting it has cost us dearly. That is a bill that we will have hanging over us for a long time. A strong, "V-shaped" recovery was more a hope than a realistic expectation.

It is in the context of a badly weakened, slowly recovering economy that the course of fiscal policy must be judged. I find it strange that monetary policy is always evaluated on the basis of where we are in the businesses cycle but fiscal policy seems to be viewed in a vacuum. Few would argue that the Fed should raise rates when the economy is falling into recession or lower rates when the economy is expanding rapidly and inflation is a risk. Unfortunately, fiscal policies are often proposed as if the impacts are the same regardless of the condition of businesses, households or even the federal budget deficit.

Businesses will invest when the returns to capital outweigh the costs. Too often the discussion about fiscal policy focuses on the costs to businesses. More weight should be given to the potential returns.

Consider two recent but contrasting periods. In early 2009, most executives' business plans boiled down to simply surviving until 2010. That meant cutting expenditures and taking on no additional costs. Firms had little interest in investing and nothing that Congress or the Fed could have done would have changed that.

In contrast, in the summer of 2003, the economy had been growing for seven consecutive quarters. We were moving out of the recovery stage into the expansion stage and firms were poised to invest more heavily. Fiscal policy fed that awakening beast and investment surged.

But it is also unclear the extent that tax cuts played. In the past three quarters, absent fiscal policy, investment in equipment and software has surged at rates that exceed anything we saw after the implementation of the 2003 tax cuts. In economics, the true cause and effect may not be nearly as obvious as they seem on the surface, or in theory.

That raises a second issue about evaluating the efficacy of fiscal policy: It is changes that matter, not necessarily levels. Economists often argue that a policy should be judged on the basis of what the circumstances would have been absent that policy. Is the current high unemployment rate a sign of fiscal policy failure or success? It depends upon what the rate would have been had the policy not been implemented, been implemented in a different manner or different polices were passed.

And that brings us to the third point about fiscal policy. Something that provides short term relief may not be the best policy in the long run. Alternatives that produce less initial bang but more long term bucks should be considered. As my example about investment in dot.coms and housing pointed out, there were significant short term gains when private capital flowed in those directions but those returns were overwhelmed by subsequent long term costs. Public capital must be used judiciously and should maximize long term growth potential.

The issue of balancing the current with the future heightens concerns about the deficit. If we increase the deficit, and remember, that can be done either through more spending or tax cuts (which have not shown to be self funding in the short run), we are creating costs for future generations. It needs to be shown that the short term gain overcomes the long term pain before we impose those burdens on our children.

What this boils down to is this: At all times, policies intended to grow the economy should be evaluated on the basis of whether they makes sense in the context of current economic circumstances, in particular where we are in the business cycle, as well as the implications for future growth and the budget deficit - not on any other basis. Conditions change and that means policies should change with them.

Chairman CONRAD. Thank you, Dr. Naroff.

Let me just go right to it, if I could. Obviously, there is a debate going on here about what is the correct fiscal policy to pursue now. I think the three of you have outlined in significant detail the economic conditions we confront now. The question for us is: What do we do about it? And the debate, to boil it down simply, is on the one hand there is a camp that says you should provide more stimulus to the economy. The very distinguished economist Paul Krugman says you have got to provide more stimulus. He recommends that we provide more aid directly to the States through FMAP and other provisions, perhaps do more in terms of infrastructure.

On the other side are those who say, look, we have got record deficits and debt now; you have got to take immediate steps to reduce deficits and debt now, so no further stimulus.

Dr. Berner, what would your recommendation be to us in terms of what course to pursue?

Mr. BERNER. Well, Senator, thanks for the question. As I indicated earlier, I think we have a number of specific problems, and I think that we ought to address our policies more specifically to address those problems. And one of the biggest problems that I think all of us have talked about here today involves housing and housing finance and the state of balance sheets, the negative equity position in which many mortgage borrowers find themselves. So cleaning those problems up, mitigating those problems, really does involve fiscal policy. And, in effect, we are using fiscal policy currently to do that. So the losses incurred on agency-backed mortgages from Fannie and Freddie, the taxpayer, you and I are paying for that as those losses occur.

The problem with that strategy is simply letting the foreclosures occur, letting the defaults occur, including the strategic defaults that I mentioned earlier, is that slow motion process really inhibits growth, it creates uncertainty, it prolongs the adjustment in housing and, by extension, in consumer balance sheets and, therefore, has a big impact on consumer spending and threatens further downside risks to home prices.

Chairman CONRAD. So if I can say, from your testimony, you would be for more aggressive intervention to prevent foreclosures and to try to close this gap between some 20 percent the people are upside down in their mortgages.

Mr. BERNER. Well, Senator, some foreclosures are not preventable, but the point here is that we want to try to mitigate those which are preventable, and we want to give an opportunity, as I indicated, with some ideas to allow homeowners to refinance where the only barrier is the refi process, where we have already got the responsibility and the liability on the Federal balance sheet for those mortgages that might default since they are backed with the full faith and credit of the Federal Government to allow them to reap the benefits of lower mortgage rates today, and they are not so doing; and, in addition, to accelerate the process of bringing borrowers and lenders together through proposals like the earned principal reduction or forgiveness program so that lenders have a performing asset which is not now performing, and the borrower can stay in their home with a reduced payment with some expectation that they will share—maybe not gather completely—in any stability or upside from future home price appreciation. And I think that is the problem, that is why we have strategic defaults, because people do not have that expectation and they will not share in that future price appreciation if, in fact, it materializes. The policies that we are pursuing today practically guarantee that that appreciation is way, way off in the future. The policies that I am recommending would mitigate that, speed up the process, and reduce the imbalances in housing.

The other things that I talked about also do involve fiscal policy. So, for example, if we were to start a job training corps, as I recommended, to bring together people who had skills with those who lack them, that is going to cost some money. But instead of giving people pure transfers, unemployment insurance, which is certainly needed in many cases, it puts money in the hands of people and gives them activities which are productive, which increase training, and which offer a lot more dignity to those activities.

So those are some of my suggestions.

Chairman CONRAD. Dr. Johnson, what would your advice be to us on what we do now?

Mr. JOHNSON. Senator, obviously the risk that we face in terms of how the financial markets see our Government debt is whether there is a better alternative out there. We have benefited greatly from the fact that while we are not in particularly good shape, the rest of the world is struggling—certainly those parts of the world that issue large amounts of government debt. But I think it is dangerous to assume this is going to continue indefinitely or even continue necessarily into next year. The Europeans are getting their act together. I do not expect high growth there, but they may well be offering debt at the euro level, for example, by this time next year that could be regarded as relatively appealing. And if we see that sort of opportunity out there, I think you will see shifts in international portfolios. I think some of the foreign holders of our debt—as you know, about half of our debt outstanding is now held by foreigners one way or another. They could shift away from the U.S., and we would have an increase in interest rates.

The best way to get ahead of this, in answering your question, is to undertake now measures that credibly reduce the deficit 10 or 15 years down the road, which would be, for example, tax reform or some form of Medicare reform, if you can deal with that. That should lower interest rates. You are reducing the risk on our debt, and that would create what the IMF likes to call fiscal space that you could choose either to pay down debt or not run up a larger deficit, or you could put that into shorter-term stimulus programs.

But I am afraid where we are today, while I am sympathetic to many of the constructive ideas that we have heard today and we are hearing elsewhere that would be trying to stimulate the economy, I would caution against doing it without a medium-term fiscal consolidation framework. That would never be what the IMF advises. Obviously, the IMF does not provide advice to the U.S. in this kind of context. But I think that is a sound principle that the U.S. uses when it talks to other countries and the IMF uses when it talks to other countries, and we should use it for ourselves.

Chairman CONRAD. So the debt commission that Senator Gregg and I serve on, the success of that commission in your mind takes on even more importance given the current economic condition?

Mr. JOHNSON. Absolutely. I think that the deficit commission and related—any other initiatives along those lines is the key to being able to provide shorter-term stimulus in creating scope for whatever kinds of measures you think would be suitable for the economy over a shorter timeframe. If you do not address the medium-term fiscal framework, then all of these additional measures are substantial risks, in my mind.

Chairman CONRAD. Dr. Naroff?

Mr. NAROFF. I look at the idea of fiscal policy in terms of a continuum rather than a specific set of policies. And, you know, if we go back to early 2009, you probably could have cut taxes to households and businesses all you want, but the return to those tax cuts would have been minimal because businesses and households were looking to survive rather than spend in any shape, form, or manner. That is the idea of where the fiscal stimulus made sense at that particular point.

We are no longer at the point where businesses are not spending or households are not spending, so the extent of the fiscal stimulus I think has to be withdrawn, and that withdrawal needs to continue, which is already underway. And, therefore, we need to be transitioning from a situation where we are strictly looking at the demand side to I think we are at a phase at this point where we are looking to sustain some of the demand that is out there, but not nearly as heavily as we had.

I think the key lesson that we did learn from the Great Depression from the 1930's is that you cannot have a failed recovery. That is what extended those downturns. And I think that is, you know, the concept behind a lot of the arguments, we need significant amounts of stimulus at this point. I do not think we need significant amounts of spending at this point, but I think we have to move more toward the combination of sustaining elements of those spending, but only those that translate into demand immediately and then move toward the tax side of the policy, the supply side of the fiscal policy, which looks to generate some initial demand but starts the process of laying the foundation for stronger growth.

I do not believe that we are going to be seeing a whole lot of activity through the interest sensitivity of businesses if we lower interest rates. I do not think that—well, I look at the levels of interest rates right now, and I find it hard to believe that we are going to go a whole lot lower than we are at this particular point. And, you know, businesses will be looking at, you know, what the conditions are to make those investments and the return on them, not just the costs. And I think what Simon is really saying, and where I agree, is that what you need to set up is the intermediate-term and long-term stability so businesses can begin the process of making those investments. But I think, you know, the rest of this year, those investments are going to be very, very cautious regardless of what the fiscal stimulus will be, whether it is tax cuts or low interest rates. And it is only as we move through really the first half of next year and maybe even into the second half of next year that we will get to the economic portion of the cycle where tax cuts can become most effective on the business side. So I view it as a continuum in that respect.

Chairman CONRAD. All right. Senator Gregg.

Senator GREGG. Picking up on those comments and those of Dr. Simon, essentially what you are saying is that the uncertainty issue and to a significant extent the short-term stimulus issue will be addressed significantly if we put in place policies which address the long-term debt issue so that people have confidence in the out-years as to where the country is going on the issue of debt. Is that true? Is that a true summation of what you were saying?

Mr. JOHNSON. Yes, Senator, that is exactly what I am saying.

Senator GREGG. Can I ask a question, again following up on that? You all talked about this issue of consumption as being a big driver, and that has always been—our Nation has always been a consumer society. But I see this recession as substantively different than any other that we have been in for a lot of reasons, but primarily because the baby-boom generation, which is the defining economic engine of the 1960's, 1970's, 1980's, and 1990's—it was such a huge generation, so productive, driving so much of the wealth of the country—was right on the cusp of retiring when this recession hit. And a large percentage of the baby-boom generation retirement savings was in contributory savings as versus defined benefit plans. That shift had occurred throughout the 1980's and 1990's.

And so what happened here was that you had this huge generation, 70 million people, the population going from 35 million to 70 million people, which suddenly found that all the money that they had saved for the purposes of retirement was significantly decreased in value, all their assets, by this recession. And now they are seeing some recovery of it, depending on how they were invested, but I think there is a fundamental mind-set shift in our Nation in this generation, which goes from consumption to savings to try to deal with the retirement they are into or about to start. But you are not going to see the consumerism that dominated our culture when this generation was so huge and was so productive and had an income. And, thus, you are going to see much less driving of the economy from the consumer side as this generation tries to adjust to the reality of retiring with less savings than they thought they had. Is that true? And if it is true, what are the implications of it?

Mr. BERNER. Senator Gregg, if I could answer that, I totally agree with you. I think that we are in a period now where—it is what I call a new age of thrift, responding to the loss of wealth that consumers have experienced, not only as you describe but obviously also in their houses and pension plans. And I think there is enormous uncertainty about the promises that have been made to consumers by governments, both at the State and Federal level, and at the local level. So all those things I think are coming to bear at the same time, and so we should not expect to see a consumer who is spending as before. I think the new normal, if you will, for consumer spending is going to be the 2 to 2.5 percent kinds of growth rates that I have described.

We should look, therefore, in my view, to other parts of our economy, you know, to provide growth, and I think for the first time since the mid-1980's, we are likely to see global growth as a source of stimulus for U.S. growth, and we should rely on that. So that means we want to keep our markets open; we do not want to adopt protectionist measures. We want to encourage the kind of global rebalancing that is needed to reduce the size of our external deficits, to reduce our dependence on global investors to hold our debt, and at the same time encourage the growth of other economies who will provide markets for our companies to export to and will provide income for people to save and to rebuild their balance sheets.

That is not an unsustainable environment. In fact, I think that is a more sustainable environment than the one we had left, where saving rates were declining, both national and personal, and where we can rebuild the foundation for a stronger and more sustainable recovery. But I think, nonetheless, there are things that we need to do short run and there are things that we need to do long run. I just want to express my complete agreement with the idea that we need to have a credible plan to address our long-term fiscal challenges. That will reduce uncertainty. The way we do that is also important. Whether we do that through higher taxes or reducing spending growth is extremely important, and we have to get our arms around the promises that we made for the future that we are going to have difficulty in keeping by cutting the growth of those programs.

Senator GREGG. Thank you. My time is running out, and I did want to get in another question. But I have heard this argument before that basically our society is going to have to look to trade and that the trade is going to be with the rising nations, the BRIC countries, for example. And I understand the logic of it, but I am not sure I accept that it is going to happen as being the driver that maintains our type of economy. Maybe it will be; maybe it will not. I think energy policy probably plays even a bigger role in that issue.

But let me ask you, Dr. Johnson, about this issue of scoring the contingent liability in the financial system correctly. It is almost a catch–22 because we are telling the banks and the financial systems they have to significantly increase their capital. And then we are hearing from the markets that there is no credit available because the banks are significantly increasing their capital. And if we went to an even more aggressive process of saying we must score the contingent liability out there and, therefore, we must actually see even higher capital levels, I presume you are assuming the way you mute this issue is by raising capital levels. You are going to even contract credit more.

I mean, don't we have a catch–22 situation from the standpoint of fiscal policy here?

Mr. JOHNSON. It is a great question, Senator. I do not think we do. There is a wonderful new authoritative paper on the effects of raising capital requirements by Professor Jeremy Stein of Harvard and Professor Anil Kashyap of Chicago University, which I commend and I will send to your staff. I do not think the effects——

Senator GREGG. You can send it by e-mail.

Mr. JOHNSON. OK. I do not think the effects are at all as portrayed by the banking community and as widely feared even by the U.S. Treasury. I think that what is going to come out of the Basel agreements, though, unfortunately, is very little by way of immediate raising of capital standards. And the quality of capital, which is more of an issue in Europe than here, but it is also an issue here, is going to be relatively low. So this is the ability of the financial sector to absorb losses.

Given just as a political regulatory outcome I do not expect a lot of additional capital to be in the system, I think we should score the liability that this creates relative to the risks that it poses. That is your standard procedure for all——

Senator GREGG. Well, we do not score a lot of things around here for real.

Mr. JOHNSON. Well, this is 40 percent of GDP, so it is a pretty big one, which I think not scoring that one would be——

Senator GREGG. So is Medicare's contingent liability. But just quickly, you do not subscribe to the view that if you put more and more pressure on the need to increase capital, which is, I accept, necessary in order to make the system sounder over the long run, that you are going to end up with contractions in credit.

Mr. JOHNSON. The point made by Professors Stein and Kashyap is it depends on how you raise capital requirements. So if you look at the way in which it was done after the stress tests, for example, last year—you know, we can have plenty of reservations about the stress tests in general. But requiring banks to raise a certain dollar amount of capital is the right way to do this, and these would be phased-in requirements. You do not want to tell people you must change your ratio of capital to assets tomorrow, because then you will certainly get a big credit contraction.

There are ways to adjust capital requirements. There are ways to make banking safer. Banking becomes less sexy, becomes less of a high-octane, high-risk, high-return activity. That is for sure. And some bankers like that and some bankers do not like that. But it changes the nature of banking and changes what a bank is as a financial asset. It does not necessarily cause a big credit contraction. That is what the experts say.

Chairman CONRAD. Senator Goodwin.

Senator GOODWIN. Thank you, Mr. Chairman, and I would like to thank you and Senator Gregg for your warm welcome. It is certainly my immense honor to follow in Senator Byrd's footsteps in serving on this Committee. And as I have said repeatedly over the past few weeks, although no one can replace Senator Byrd, what I hope to do is emulate his work ethic and his commitment to this Committee, the Senate, and the State of West Virginia. So thank you very much.

Dr. Naroff, I have a bit of a tangential question for you. You alluded to some of the challenges facing our State and local governments in passing in your testimony, and I wanted to talk a little bit about the impact of the huge unfunded liabilities that so many of our State and local governments are facing.

Now, I know in my limited experience in the State of West Virginia we were looking at billions of dollars in unfunded actuarial accrued liabilities in various pension retirement systems and other post-employment benefits. The State has strived aggressively and made courageous efforts to tackle that debt and amortize those liabilities over a period of years. But as you would expect, these decisions came at the expense of other spending priorities, priorities which were undoubtedly much more politically popular and needed in their own right.

So my question for you is: What is the impact of these enormous unfunded liabilities that so many of our States and local governments are facing on future economic growth? And what sort of pressure does it place on the Federal Government's efforts to tackle these issues?

Mr. NAROFF. Well, that is really the thing that I think every State and local community is trying to get their arms around at this particular point, and there is no simple and quick resolution to that problem. I think that is the first thing to keep in mind.

The unfunded liabilities in pensions, which States are simply not paying their shares to in order to have the temporary balancing of the budgets—and that is continuing and will likely continue—is going to mean that all of those, whether they were political or necessary, programs are going to have to be reviewed. So sometimes—and I think this is the time, you know, crises, if they are handled correctly, will create some fairly significant short-term pain, and I think that that is going to continue to be the case in State and local governments. But that is a pain that should have been felt over the last 5 to 10 years as these liabilities were building, but the unwillingness to recognize them continued.

So my view is that at least in terms of Federal fiscal policy, I think the States need to come to grips with their spending patterns and their decisions and, to a very large extent, to the extent that they have to make the cuts that are necessary, at this point they need to get their fiscal houses in order.

To the extent that there are some temporary cyclical issues that they might be eased through, then there may be a role for Federal policy. But for the most part, I think it is really time for the State and local governments to start recognizing that the costs that they have imposed upon themselves are just not sustainable anymore. And while I do not argue with some of the fiscal stimulus funds having gone to the States, because it was a sudden shock that you could not plan for, now they have had a couple of years to start dealing with that. And while you cannot address 10 or 20 years of fiscal irresponsibility overnight, I think they need to be forced to address those; otherwise, it never will end.

Mr. JOHNSON. Could I just add and emphasize the importance of education in this entire adjustment process. I think what we are seeing at the State and local level is big cuts in education. If you think about the nature of our economy going forward and what we have seen over the past 20 years, the difficulties that people have if they do not get a college education, do not have at least 1 year of college education, how hard it is to participate in the modern economy, how hard it is to have wage growth.

You know, Senator Gregg's idea that we move away from consumerism, we have other motors of growth, I think we all would support that. But increasing wage inequality, people with only high school educations or failing to complete high school, not being able to participate and get a decent job in a more globalized economy, for example, with the lack of skills that Mr. Berner has been emphasizing is just getting worse, because long-term unemployment causes all our human capital to go down. I think this is going to really come through as a huge weakness for our growth potential. But what can you do about it when you do not have space at the Federal level because of the longer-term fiscal issues? That is the question. Unless you deal with the long-term fiscal issues, you cannot create the space to deal with these pressing issues such as education.

Senator GOODWIN. Thank you, Mr. Chairman.

Chairman CONRAD. Thank you, Senator Goodwin.

Senator BUNNING.

Senator BUNNING. Thank you, Mr. Chairman. Thank you for showing up, panel. A lot of brains sitting at one table.

I would like to give you a quote from a former Federal Reserve Chairman who, in my opinion—my opinion—caused three major recessions in this United States with his monetary policy. On "Meet the Press," he said that the U.S. is experiencing "a pause in a modest recovery that feels like a quasi recession."

Do you agree with that characterization? What policies would you recommend to change that situation? What is the worst thing the Federal Government could do in this situation? Realizing that we have 15.5 million either full-time or part-time unemployed people, 8 million of which were unemployed in the year 2009. So are we going to have any jobs to get them back to work? Are we going to be able to raise our economic level so that we can create those jobs?

I would like anybody's opinion of that statement.

Mr. NAROFF. Well, let me start the discussion. I do not necessarily think it is a pause. I think that given the headwinds, given the damage done by the blow-up of the housing market and the near collapse of the financial sector, the idea that we could get anything more than a modest, you know, slow-growth recovery I think was unrealistic. It was hopeful. The 5-percent growth we got at the end of 2009 was largely just making up for excessive inventory cuts and investment cuts that were done at the peak of what we could call the panic in the first half of 2009. Except for that, I think this 2-, 2.5-percent growth forecast, which I have and I think the others are not far off of, is likely to be sustained. So I do not see it as a deceleration necessarily in growth or a pause in growth as much as that is the reality of what we are facing given the damage done to the economy.

Senator BUNNING. Anybody else on this statement of Dr. Greenspan?

Mr. JOHNSON. I agree. I do not think it supports—I think it is slow growth. It is a disappointing recovery. It is probably one of the slowest recoveries we have had since World War II. You need to deal with the long-term——

Senator BUNNING. Let me give you—Dr. Johnson, you are a member of CBO's panel of economic advisers. I am sure that you are aware CBO has predicted that economic growth will actually fall by 1.4 percent if the 2001 and 2003 tax relief is allowed to expire. Why does CBO predict that it would slow down our economy? I am looking to get it going faster, and by removing the tax cuts of 2001 and 2003, it is CBO—I want CBO to be realized as the independent scorekeeper here. You have predicted that a 1.4-percent decrease would occur.

Mr. JOHNSON. Senator, I am on the panel of economic advisers. I am not responsible for the——

Senator BUNNING. I did not say you were, but maybe you can explain that.

Mr. JOHNSON. Yes, sure. It is a sensible proposition that if the tax cuts expire completely, that will have an effect of slowing down the economy. By the way, if you are worried about stimulus, you should look at alternative ways of stimulating the economy. It is not clear that if you——

Senator BUNNING. I have looked at them.

Mr. JOHNSON. And I for one expect and would support partially continuing some of the tax cuts. I think that would be a——

Senator BUNNING. Kentucky has got a $2 billion shortfall—$2 billion out of an $18 billion budget over a 2-year period, and they are coming to the Federal Government for $240 million extra—are you kidding me?—so their budget can be balanced. What if all 50 States did the same thing?

Mr. JOHNSON. Well, Senator, we are obviously in a very difficult place from a fiscal point of view. I am not advocating unconditional massive transfers at the State level. My point is if you had an agreement on the longer-term budget, then that would create fiscal space that you could choose whether——

Senator BUNNING. I agree 100 percent.

Mr. JOHNSON [continuing]. Or additional spending. But that is the problem. If you do not deal with the long-term issues, you have got a potential credibility issue, and the financial markets, much as they may like you now and let you borrow 2-year treasury notes that are at record lows, that will not continue indefinitely if they do not——

Senator BUNNING. Not if we have economic recovery, it will not. You obviously know that zero to one-quarter of 1 percent is what the Federal Government is borrowing short-term money at right now. Zero to one-quarter of 1 percent. What will happen if we do get some kind of economic recovery? Won't our borrowing go up some?

Mr. JOHNSON. Yes, and I would also emphasize, compared to other countries, we have a lot of relatively short-term borrowing. The average maturity on our debt is 4.4 years. So, yes, these are very real risks, Senator. I am not playing them down at all. I am emphasizing they all push in the same direction, which is you need a longer-term fiscal consolidation framework. Without that, we are really asking for trouble.

Mr. NAROFF. And I also believe that when you look at the 2001 and 2003 tax cuts, you should look at that in the context in which those tax cuts were actually implemented. It was a totally different economy, a totally different situation as far as budget——

Senator BUNNING. I do not disagree with that at all.

Mr. NAROFF. And some of those tax cuts made total sense at that time. Under the current set of circumstances, they simply may not create any new economic activity. And that is my point about evaluating each of those cuts individually to see whether they make sense in either sustaining them or allowing them to sunset in the context of where we are today.

Senator BUNNING. I have one more question. I just want to get it in before my time is up.

We have heard time and time again that consumer spending is weak because consumers save rather than spend any additional income. You all said the same thing. Is this not a result of cheap money over the last decade where we have achieved a negative real savings rate and the average American is already vastly overextended? How can we expect consumer spending to have increased when the debt levels are so high?

Mr. BERNER. Well, Senator, that is in part why, you know, some of the remedies that we are talking about here involve helping consumers reduce those debt levels in a responsible way. And if we afford them the opportunity to——

Senator BUNNING. Are you talking about forgiving their debt?

Mr. BERNER. Well, in some cases, Senator, you know, when you are in very deep difficulty, either there will be forgiveness or there will be a default. So those are the choices.

Senator BUNNING. Are those the 18 percent that send their keys in?

Mr. BERNER. Those are the 18 percent that send their keys in, plus the ones who are foreclosed upon because——

Senator BUNNING. Well, sure, because the bank has to inherit that decreased value.

Mr. BERNER. So the choice we face is whether to let that process continue at the pace that it has gone and to have housing markets that continue to suffer, or whether we can choose policies that may speed up the process where the burden of the cost of that is shared between borrower and lender and taxpayer in a sensible way so that the situation we face now can be mitigated.

Obviously, if we were to choose to rewind the tape and we were to choose to do things differently, we would have. But given that where we are involves these——

Senator BUNNING. I wish we could rewind the tape.

[Laughter.]

Mr. BERNER. We all do, Senator.

Given where we are, we have a set of not-so-good choices from which to pick, and that is where we are.

Mr. JOHNSON. I agree with you, Senator, I think, on your overall assessment of the Federal Reserve's policy the way it led us here, including what Mr. Greenspan did, and the fact we are prone to repeat this because we have the same structure——

Senator BUNNING. Well, I understand that, and my complaint to Chairman Bernanke is the hesitant way in which the Fed has proceeded with the debt level that we have. And his balance sheet is now $2.8 trillion. I mean, I have a hard time getting my hand around $2.8 trillion on the balance sheet of the Federal Reserve. And what he does is he goes out and buys treasuries to sustain the treasury market, and that is how he fills up his balance sheet. So it is a very dangerous policy.

Thank you.

Chairman CONRAD. Thank you.

Senator Begich? And let me just say to all members, I have been very liberal today with everybody.

Senator BUNNING. Thank you.

Chairman CONRAD. No, Senator Bunning, I did not treat you any differently than anybody else.

Senator GREGG. Progressive.

Chairman CONRAD. We have gone over with everybody but Senator Goodwin. We appreciate very much your discipline. So I am going to treat everybody else the same way to—you are going to be able to go over by a couple of minutes, at least.

Senator Begich?

Senator BEGICH. Mr. Chairman, thank you very much. Thank you for that comment. I leaned over to Senator Goodwin, and I said, "You get credit points because you left time on the clock, which we will all consume."

Thank you all for being here. First, let me give you a little context. I represent the State of Alaska. I have been in the small business world since the age of 16, and my wife owns and operates four small businesses. We have built these businesses from scratch, so we understand what real life is about. It is great to hear all the theory and the discussion, but we have lived it, we have experienced it, and we have seen it in both good times and bad times. So I wanted to give you a little context there so as my questions come out, you will understand where I am kind of trying to drive to. And also it seems we have a short-term memory on the 1980 recession when, if you were a small business person and you wanted any money out of the market, you were paying 19 points on prime plus, depending on what customer rate you were. People forget that. You talk about seizing up capital, that was an unbelievable time. Banks still wanted to loan you the money because it was a good return, but businesses were not anxious to touch it because of the rates and it was all short term.

In Alaska in the 1980's, we saw half a dozen, up to maybe I think eight banks, disappear overnight literally. We saw probably 20,000 people leave our State in less than 6 months. So we have seen what can happen. We saw in Anchorage, the largest city in the State, its assessed valuation almost cut in half because of real estate. Sad to say I have been in the real estate business also for all this time, so I have seen it come and go.

This recession, we did not lose anybody. No banks failed. We had the highest unemployment in probably two decades, but now 3 months have gone by, and we have ratcheted down I think by almost six-tenths of a point, going the right direction.

We have had housing pricing now moving up about 14 percent, which is very positive. Still, our new starts are very low, and I think that is what is experienced around the country. We learned something from the 1980 crash: diversification, focus on job growth, and quick stimulation to get money into the economy but look long term.

So here is my first question. Do any of you agree with this statement: that the first thing we need to have is certainty in our debt, our tax policies, and spending? And when I say certainty, not just for the next election cycle but long term. Does anyone disagree with that?

[No response.]

Senator BEGICH. OK. Silence is approval. That is how I operate. The second question is: In order to move the economy forward, do any of you disagree that the combination of your ideas, some short term and long term, is what is necessary, not one or the other? Does anyone disagree with that?

[No response.]

Senator BEGICH. OK. Now I am going to throw some ideas out. I want to see your response, and I am going to thank the Ranking Member, Senator Gregg, and Senator Wyden who have proposed a piece of legislation on tax policy, because I also heard—and correct me if I am wrong here—different levels of what those tax cuts should be or should not be implemented. I did not hear anyone said all of them 100 percent. What I heard was variations.

So why not, instead of battle over that, which will be a bunch of special interest debate and discussion of which tax cut gets who, which one will benefit, what is the level, why not just reform the system? And the Gregg-Wyden piece of legislation on tax reform is dramatic, and I do not know if any of you have looked at it. But it seems like that sends a message to the business world we are bringing some down into the middle class, that we are protecting them, and simplification, which brings confidence level back into the consumer. And to me the biggest number I am interested in, unemployment is, you know, watching—it is consumer confidence. If people are not confident, they are not spending one dime. They are not investing.

So give me first your thought on the Gregg-Wyden bill. Then I have another one, which is the Mark Udall bill, which is on credit unions who are capped on what they can invest or use to put out into the marketplace, right now 12.5 percent of their capital for small business loans. This would raise it to 25 percent, without putting one Federal dollar into it, just taking their capital and putting it out into small businesses.

So, first, Gregg-Wyden, anyone want to comment on that tax policy?

Mr. BERNER. Senator, why don't I start? Gregg-Wyden would greatly simplify the Tax Code, which is something we all would like to see. It would add certainty to tax policy. And it would take away a lot of the special preferences that are built into the Tax Code. You know, all those things economists will tell you are good things.

Senator BEGICH. And the business rate that is—correct me, Senator Gregg. I think it is 24 percent, if I remember that number right.

Senator GREGG. That is correct.

Senator BEGICH. That gives competitive edge to one of the questions you all said was our ability to compete worldwide.

Mr. BERNER. Right, and that would more or less level the playing field with respect to other countries. It would broaden the tax base, which is extremely important in thinking about how we want to deal with our fiscal problems going forward. And so by taking away some of those preferences, it is going to hurt some people, but it would broaden the tax base, collect more revenue, give us a more stable tax system. All those things are to be desired.

Moreover, when you think about how we got to where we are in housing, for example, it was not just easy credit. That was certainly a contributor. It was not lax underwriting standards. That obviously was a contributor. But tax policy had a role to play in it as well, and we have endorsed that in the past as a society. Maybe it is time to rethink that so that we can rebalance our economy and have more resources for other things like education, like productivity-enhancing investment. Clearly we do not need more housing in terms of the stock of housing right now.

Senator BEGICH. That is true. Inventories are high.

Mr. BERNER. Right. And so as we think about the role that tax policy can play in all that, you know, I commend you to advance that argument in the Congress and your leadership in doing it.

Senator BEGICH. Anyone else want to comment?

Mr. JOHNSON. I do.

Senator BEGICH. Then I will come back on the Udall one just quickly, but go ahead.

Mr. JOHNSON. I must admit I have not studied this bill. I will remedy that this afternoon.

Senator GREGG. I will e-mail it to you.

Mr. JOHNSON. Thank you. I think, as I said before, now is the moment for tax reform for exactly these reasons, and the advantage is because we have such an antiquated, painful system, it is going to be pretty compelling to many people that this is a good idea.

I would hope that we have on the table versions of the value-added tax proposed by Greg Mankiw, for example, which I think are very sensible and middle of the road. We need to look at all the tax breaks hid in spending programs, including the mortgage interest tax deduction, as Mr. Berner said.

Carbon pricing has to be on the agenda. Looking out 20 years, that is your horizon for this budget, your budget thinking, and you can decide what to do with the revenue. You can use that to reduce other parts of your taxation if that is your priority. But this is an important issue going forward for energy.

And the financial activities tax, which is a form of value-added tax for the financial sector, as proposed by the IMF, again is an idea that will not come quickly, but will come over the next 20 years. It will come through the G–20, for example, and we should be including that in a 20-year tax reform planning horizon.

Mr. NAROFF. I cannot argue with that at all. I am now a small business myself, and——

Senator BEGICH. That is good and bad. You will be working 20 hours a day.

Mr. NAROFF. My accountant loves me and I do not like the accountant, for obvious reasons.

You know, this is not a tax system that anybody would ever sit down and want to create from day one. And, you know, either—the problem we face in the issue of what do you do about taxes, what do you about the 2001 or the 2003? Do you do them all?

Senator BEGICH. Right.

Mr. NAROFF. It is the simple fact that we start with the current system, and if you start with the current system, you have to move from that current system in evaluating any changes that you make.

And under those circumstances there are always winners and losers. And that is what I think creates, you know, the havoc in any tax policymaking at this point.

Massive reform, if it is at all done, would get around all of those individual decisionmakings. I do not think it is a good thing to simply say, well, we will keep all the 2001 and 2003 so we do not get into the discussion on it, because there is a lot of those taxes that will have limited or no impact on the economy and, you know, in the context of the budget deficit just be a loss of additional revenues.

So by restructuring it to a large extent, you get away from these crazy debates that are always going on, and that would be wonderful.

Senator BEGICH. Well, thank you very much. I would ask you about the Mark Udall bill, but I do not want to take up any more time, Mr. Chairman. But I appreciate the comments because I am in this—kind of growing into this camp that, you know, spending our time messing with these old cuts and trying to figure out what is right, what is the right number, who is in, who is out, when really that will not change the confidence level in the consumer. And part of this equation is that consumers have to feel—and I say consumer and business. Both are the same in this context. And it seems to me it is time to just rejigger it and have the community feel like maybe we have done something long term here that brings certainty to the business world, but also to the consumer, the middle class, who will determine spending habits or not.

And so I appreciate all of your comments, and I will leave it at that, Mr. Chairman. Thank you very much.

Senator GREGG. Mr. Chairman, I would just like to congratulate the Senator from Alaska for his insightful, thoughtful, substantive line of questioning. But, more importantly, I look forward to passing him the torch of this effort on tax reform, which is critical.

Senator BEGICH. Thank you, Mr. Ranking Member. Thank you.

Chairman CONRAD. Senator Nelson.

Senator NELSON. You all testified that you do not think that the tax cuts in the stimulus bill had much effect. Tell us whether you think the spending in the stimulus bill had as an effect.

Mr. NAROFF. Well, I am not sure I completely agree with the Blinder/Zandi totals there. But, you know, I look at it in the context of, you know, the strategy that they took, that if we did not have it, what would the economy look like, which is one way of looking at it. Clearly, the other alternative is if you took the same amount of money and you spent it in different ways, whether through different tax cuts or different spendings, you would also have a different outcome.

But since all we had was that set of policies, I think it is hard to disagree that there was a significant impact, I think nothing close to what we had hoped when you spent the kinds of money that we spent, and a lot of that is still being spent, and I think that needs to be kept in mind.

I think some of the concepts in terms of infrastructure spending made sense because I think most of us would agree that if Government is going to spend money, you want to spend something that provides long-term returns to the economy, and nothing does that better than infrastructure. But there is a lot of other spending that just simply transition the economy from 2000 into 2008 to where we are right now, but I think you have to say that it has a moderate effect and really kept us out of a significantly longer and deeper recession.

Senator NELSON. Do the rest of you agree?

Mr. BERNER. You know, you get different bang for the buck out of different kinds of spending, Senator, and unfortunately, I think a lot of the spending that was done in haste and in an effort to help the economy get out of the recession, to help State and local governments who were hit with the shock of the downturn, you know, probably was not as productive as it could have been.

I agree about the infrastructure spending piece. We need enormous infrastructure repair. We need a program of infrastructure repair in this economy that goes beyond short-term stimulus. And providing aid to State and local governments in the form of FMAP or other assistance was a short-term measure that probably avoided some job cuts. But there are other, more efficient ways to deploy Federal resources in terms of thinking about fiscal stimulus. I have identified some of them.

Mr. JOHNSON. Senator, I testified to this Committee in the run-up to the discussion of the fiscal stimulus, and I said at that time I am not a proponent of discretionary fiscal stimulus. But this is an unusual time, and I think the sense that we all had in that discussion was that something was needed to bolster confidence in the U.S. economy.

I think as I look at Table 2 in the Blinder and Zandi paper, I think that the money was spread in some sensible ways. Of course, infrastructure spending was pretty small, actually, in terms of the spend-out. I think it was a good mix. I think it was a one-off. I do not think you can go back and do this sort of thing again. It was a very unusual problem. Hopefully we will never see it again in our lifetimes. I worry that we will. I worry that we have not fixed the financial sector and will have to go back to a point where we have to throw money at a problem in a sense to prevent it from becoming much worse. And, roughly speaking, it works in the short term, but it stores up lots of issues for the future, including the debt, including the financial sector.

Senator NELSON. Mr. Chairman?

Chairman CONRAD. Yes, sir—

Senator NELSON. Do you remember when we tried to get a lot more infrastructure spending?

Chairman CONRAD. Yes, sir. That is what the Ranking Member and I were just saying. We tried to get $200 billion.

Senator NELSON. Let me ask you—these two esteemed gentlemen right here, the Chairman and the Ranking Member are on this Deficit Reduction Commission, which I hope and pray is going to be successful, but since they have a threshold that they have to get 14 votes of 18 on the Commission, there is a lot of skepticism that they are going to be able to get that on whatever the package is that they come up with.

So if that skepticism bears out to be true—which I hope it does not, and I am prepared to vote yes on their package, and I have not even seen it yet because I think, as you all have testified, we have got to do something about the deficit. But if it fails, what happens? What do we do?

Mr. BERNER. Senator, I am not sure that we have room for failure because, as Simon and Joel have talked about—and I have would echo their concerns—ultimately global investors who hold 55 percent of debt held by the public are going to register their vote in financial markets, and they will look at our inability to deal with our long-term fiscal problems, and they will look at the lack of credibility in our willingness to deal with those problems. And that will raise the cost of borrowing not only for the Federal Government long term, but also for businesses and households here as well.

Moreover, the debt service that will grow over time will take increasing resources out of our economy that we can use for other productive means. And so that is the longer-term cost of not addressing our fiscal problem.

Senator NELSON. And creates an uncertainty and lack of confidence——

Mr. BERNER. Correct.

Senator NELSON [continuing]. In the U.S. Government's ability to manage its financial affairs.

Dr. Johnson?

Mr. JOHNSON. To go back to Senator Gregg's point about Greece at the very beginning, according to the IMF's numbers, Greece's general government gross debt—this is the numbers which have the best comparable measures—was in 2010 133 percent of GDP; the United States by the same measure is close to 93 percent of GDP. So I think this is the answer—what happens if it does not work? You have some time. But you do not have a lot of time; however long it takes you to get from 90 to 133 would be a rough measure.

Obviously on net debt terms, it is not quite as bad, not quite as dramatic, but you know what the trajectory is. The pressure will make us change sooner or later. We should do it now. We do not want to be forced, like the Greeks are being forced or the Spanish are being forced, to do things in a precipitant manner. That is really bad for productivity and really bad for small business, bad for everybody. Do it now when we still have plenty of time. That is the right approach.

Mr. NAROFF. If you want to know what it is going to look like, look at most of the States. They have hit that point right now, and, you know, they are scrambling exactly in the way that you commented in order to deal with the expenses that have basically overwhelmed them, and that is what we will have to be doing.

You know, to some extent that may force coming to grips—I know Dick has, you know, harped on this several times, on the longer-term programs for retirees, medical costs and so on that we have put into the entitlement programs. Crisis may be the only thing to cause us to deal with them, but we should not wait—we should not have to wait until a crisis to deal with them, because they are not- -you know, when we reach that point, it will be, you know, fairly significant on the kinds of cuts that have to be implemented.

Senator NELSON. And speaking of the States, we are going to vote on something today or tomorrow because the States have not provided the revenues in their States in order to fund their fair share of Medicaid or education. And so, of course, they come to us then in times like this and that want us to bail out those accounts and, of course, the more that we do that at the Federal level, the more we add to the national debt. It is a vicious cycle.

Mr. NAROFF. Well, it is worse than a vicious cycle in that it is creating the incentives not to deal with the problem, and that is what you do not want to do.

Senator NELSON. That is exactly right.

Thank you, Mr. Chairman.

Chairman CONRAD. Thank you.

Senator SANDERS.

Senator SANDERS. Thanks very much, Mr. Chairman. This is a great discussion, and if I did not have an appointment at 12 o'clock, I would prolong it.

I wanted to maybe inject an aspect to this discussion which I have not heard yet. We keep talking about the economy in general, but you know what? This is—or we are talking about taxes in general. But the reality of life in the real world is somewhat different.

For example, during the Bush years, median family income for the average American went down by $2,200. Seven million people lost their health insurance. Eight million people dropped out of the middle class and went into poverty. So while the middle class is shrinking and poverty is increasing, in this general abstract world that you are talking about, not everybody has been hurting, because during the Bush years, among other things, the people on top did very, very well. I think the top 400 wealthiest people in this country saw a doubling of their income. We now have a situation where the top 1 percent earn more income than the bottom 50 percent, and in terms of wealth, we have the most unequal distribution of wealth in the industrialized world. The top 1 percent own more wealth than the bottom 90 percent. So we are not talking—and we talk about tax reform. Does anybody in their right mind think that you are going to have equitable tax reform here in Washington where we are going to be descended on by all kinds of lobbyists representing the wealthiest people and loopholes are going to be put in and it is not going to happen? The rich and wealthy and large corporations have enormous influence over this institution. As a result of the Supreme Court decision in Citizens United, they are going to get more of their friends to be here representing—that is the real world. Sorry to, you know, bring forth some reality here.

So now what we are talking about is we all acknowledge the economy is in terrible shape. We know that. And we all acknowledge that we have a very large national debt, $13 trillion, an unsustainable situation, a $1.3 trillion deficit. But I would hope we can hear some discussion that as we move forward, we do not see pain brought all about. Why should working-class people who have already experienced pain be asked to experience more pain? Should we really raise the Social Security age to 70 for those people? Should we do, as I gather some want to do this week, cut back on food stamps when we have millions of families who are struggling to provide food for their kids?

Let me suggest to you, as someone who believes the deficit is a serious problem, but also thinks that we have got to create jobs that our economy desperately needs. The American Society of Civil Engineers tells us that we have a $2.2 trillion need for investment in infrastructure in the next 5 years alone. I am a former mayor. Let me tell you something. The infrastructure does not get better—right?—unless you invest in it. Why are we not investing in it and putting people to work doing that?

On the other hand, I do understand you cannot spend, spend, spend. You have got a deficit problem. Let me give you some situations here that I think we can address.

About $100 billion a year—and the Chairman of this Committee has made this point many, many times—in taxes are avoided by large corporations and the wealthy by going to tax havens in the Cayman Islands. How many corporations existed in that one building, Mr. Chairman?

Chairman CONRAD. Eighteen thousand.

Senator SANDERS. A little bit crowded. A little bit crowded. It was hard to do their work with 18,000 corporations in one building. Now, it would seem to me if you can get——

Chairman CONRAD. It was five stories.

Senator SANDERS. Oh, OK. Then that is no problem.

[Laughter.]

Senator SANDERS. But it would seem to me if—and the estimate, I think, Mr. Chairman, was something like $100 billion avoided in taxes. So why aren't we beginning in a serious way to talk about that? In 2005 one in four large corporations paid no taxes at all. This year—ExxonMobil last year had a bad year. They only made $19 billion in taxes—$19 Billion in profits. You know how much they paid in taxes this year? Zero. They got a $156 million refund from the IRS. That is the tax system that the IRS and big money has helped create.

So my question to you is: Shouldn't we be focusing on creating jobs in infrastructure, stopping the absurdity of importing $350 billion a year of foreign oil, move toward energy independence, and at the same time go forward with deficit reduction in a fair and progressive way which does not hurt middle-class and working-class families? Dr. Johnson, why don't you start it? And I would like to hear from the others.

Mr. JOHNSON. Thank you, Senator. Yes, of course, we can put more money into infrastructure, and I supported the Committee in that discussion over a year ago. It is not that easy given the way that our spending is set up. But that certainly is a sensible proposition.

And in terms of tax reform, I think what is particularly interesting and intriguing about the value-added tax is that some of this idea is coming from people to the right of the political spectrum, like Professor Mankiw, as well as some people on the left, and how progress or regressive your VAT system is, we can see from the experience of other countries. It depends on how you design it, what exactly you are taxing, what are you zero-rating.

It is a relatively hard tax to avoid. It is a tax that focuses on consumption rather than on income, which has sensible effects on incentives. And I am somewhat encourage that people are moving at the technical level in the direction of thinking hard about those kinds of proposals. Obviously, it is a political decision how regressive it will be, and I am rather on your side in thinking that the vested interests, once they get their hands on it, will distort it.

I do think in all of the issues that you raise, one thing that we must not avoid is Medicare. So Medicare is, if you look out at the 30-year, 40-year horizon, that is a huge issue. And do we address Medicare, for example, by basing it on lifetime earnings, your access to Medicare?

Senator SANDERS. But Medicare is part of our health care system, and as you well know, we end up spending almost twice as much per capita on health care as any other major country on Earth, and our outcomes in some cases are not as good. So I do not think it is just a question of Medicare. It is a question of a health care system geared toward profit in which people are making all kinds of money out of it and not necessarily providing quality care.

Mr. JOHNSON. Well, that is a very good point, Senator, and I am sure you are right, the health care system as a whole needs to be addressed. Unfortunately, it is the case if you put all the European Union health spending projections on a comparable basis to what the CBO uses—the IMF has done this, but it is not that widely known—their numbers are just as bad as ours in terms of containing future health care spending.

So all the systems across the industrialized world have a very similar problem, which is the demographics and——

Senator SANDERS. Aging population.

Mr. JOHNSON. The aging population and the increasing cost of medical technologies. And so the question is: To what extent do you give people access to those technologies later in life?

Senator SANDERS. But here we are getting back to the basic point. That is a reality. It is going to be a reality in Europe, a reality in the United States. People are getting older. Health care becomes more expensive. We want the most cost-effective best system we can. But I do not think in the midst of all of this—the point that I am making is we have got a whole lot of problems. Some of my good friends will end up concluding that the way you solve these problems is punishing working-class people, low-income people, middle-class people. That will ultimately be their solution.

I think when you have a society which is moving in many ways toward oligarchy—I thought I heard laughter.

Senator GREGG. I was asking who those good friends would be.

Senator SANDERS. Well, some of them sitting right in this room, some of them who think it is funny when we talk about oligarchy when the richest 1 percent own more wealth than the bottom 90 percent, and we see that trend growing even wider. That is what I would call oligarchy.

But be that as it may, I think the key debate—and I think Senator Conrad earlier—I was watching on TV—you know, raises the issue. We have got a huge debt. We have got to deal with it. We have got a huge financial crisis. We have got to deal with it. How do you deal with it?

Well, I would suggest that, everything being equal, unless we rally the American people, working-class, low-income, middle-class people, it will be dealt with. It will be dealt with by making the poorest people poorer. It will be dealt with by seeing the middle class decline even more. It will be dealt with by seeing the gap between the very rich and everybody else grow wider. I think we can do better.

Dr. Berner, do you have thoughts?

Mr. BERNER. Sure, Senator, I think we can do better, and it is clear that the income inequality problem that you are talking about has been growing for a long, long time. It is clear that part of the source of that problem has to do with educational opportunities and other factors. And it is clear that Federal policy as well as policies at other levels of Government can do things to deal with that. But some of those things involve allocating resources away from some areas and into others, away from, as I think Simon indicated, more broadly health care so that we do get better outcomes at lower cost, so that we have more resources left over for education and infrastructure investment, both of which will provide jobs and human capital.

Senator SANDERS. Right.

Mr. BERNER. That is the kind of economy I think we want in the future, and, you know, what is required is your leadership.

Senator SANDERS. OK. Thanks very much.

Dr. Naroff?

Mr. NAROFF. The problem we face right now—and I do not disagree with you in the least. You know, when people would say to me, well, you know, X percent of the top income are paying Y percent of the taxes, doesn't that show that the tax system is fair or is taxing heavily, and my comment is it can be done through either the structure of taxes or the structure of income, how it is distributed. And you have to know the reasons for the change and the move. And that is obviously the important factor.

But the reality where we are right now is that we have no longer any wiggle room. Ten years ago, if the deficit went up a couple hundred billion dollars, it was not going to create major long-term crises as far as the economy is concerned. All our ratios were in good shape. We do not have that luxury right now. And what that tells me is that getting out of this slow-growth environment and balancing—and moving to a lower level of a budget deficit is going to require some groups to pay more. It is the politicians that decide which groups to pay more.

Senator SANDERS. Well, or maybe the campaign contributors play a role.

Mr. NAROFF. Well, whatever. But the point is, you know, in the current set of circumstances, you know, who are the people that are not spending? And part of the problem is what I find most interesting is that when I give—I give lots of talks over the course of a year to business people and average groups, and I ask them how many think that the recession is still going on, and most of them still raise their hands. And most of these are middle to upper-middle class. A lot of them are business people, small business people, and they feel that. They do not feel that they are seeing what is going on. They are not getting the benefits of it.

Senator SANDERS. Right.

Mr. NAROFF. And, consequently, they are not spending as a result of that. So something that provides them with the impression and the reality that the economy is moving in their direction, to the extent that improves confidence, is going to improve spending and get us out of the——

Senator SANDERS. Right. Well, thank you all very much. Mr. Chairman, thank you for your indulgence.

Chairman CONRAD. Yes, thank you for your excellent questioning.

I would like to go to this panel on a separate question, and that is, how we got into this mess, because I have my own view, and I am going to try it out on each of you. I would be interested in your reaction.

You know, as I look back, it strikes me that we had a series of bubbles formed. We did not just have a housing bubble. We had an energy bubble, we had a commodity bubble, and the evidence is all around us. Housing, we all know what happened to housing prices. On energy, oil went to more than $100 a barrel. On commodities, wheat went to more than $20 a bushel. So that is evidence of bubbles forming in lots of different places in the economy.

Well, how did we get so many bubbles forming simultaneously? As I look back, it seems to me you had an overly loose fiscal policy, the responsibility of Congress and the President; massive budget deficits in the good times. On the monetary policy side, you had an overly loose monetary policy after 9/11. We had unusually low interest rates for an extended period of time and substantial expansion of the money supply. And on top of it all, a policy of deregulation, so nobody was watching and nobody was enforcing laws that did exist and some of the laws were inefficient and insufficient to deal with the problems of, for example, an AIG.

So when you have an overly loose monetary policy and an overly loose fiscal policy at the same time—which is very unusual in economic history, as I have studied it. Usually you have one or the other. It is unusual to have them both simultaneously. That provides the seed bed for bubbles to form. And so we got multiple bubbles. Ultimately bubbles burst, and there is enormous economic wreckage.

I would just like to hear your observations on that view of economic history. Dr. Berner?

Mr. BERNER. Sure. Senator Conrad, I think that you are pretty much on target, and I would start with the regulation piece of it. We had inappropriate regulation in the financial services industry and financial markets. We now recognize that in hindsight. We are trying to deal with that.

What we failed to understand was that, you know, the more we want our markets in other respects to be open and free and to allow for failure since the failure impinges on the financial system and on lenders, that requires more not less regulation, appropriate regulation of the financial system. It includes the appropriate capital and liquidity requirements. It includes the appropriate regulations ruling underwriting standards and all the rest of it.

So as I was listening to you talk, I thought to myself, well, the dimension of monetary policy that was too loose was in the regulatory front, which allowed the credit bubble to form an excessive growth in credit. And the legacy of that bubble, if you will, is still with us because unless we defease or write off that debt against which the value of real estate and other things has gone down, then we are going to be stuck in a low-growth economy where we have misallocations of resources.

So the misallocation of resources is also the legacy of that that we are dealing with, and, you know, we are going to have to deal with that. That is why I tried to——

Chairman CONRAD. Well, when you say misallocation of resources, what I understand you to mean by that, too much money into housing?

Mr. BERNER. Too much money into housing, both because of the things that you mentioned on a macro sense, but also because of the incentives built into the Tax Code that encouraged that. And I would point, for example, to the 1997 act which changed the capital gains treatment of housing. That is something that most people have overlooked, but I think it encouraged churning in housing an added to the subsidies that we have for residential real estate.

Chairman CONRAD. Very generous treatment of capital gains.

Mr. BERNER. Very generous treatment. Now there are not any capital gains, so maybe we do not have to worry about that for a while. But the fact of the matter is that was the stance of policy, and so all those things, as you mentioned, came together, and that is why it is so appealing to think about using this moment not only to fix our long- term fiscal future to make it sustainable, but to address some of the things in the Tax Code through tax reform that would take away those incentives.

If I could just take one more minute, Senator Gregg alluded to energy policy earlier, and I think that that is an extremely important aspect of what we are talking about here. For years and years, we have resisted the idea that we should have higher prices for energy, prices that reflected what they were in other parts of the world. And so we have subsidized, if you will, relative to other economies the cost of energy, and we have insisted on having low-cost energy. And as a result, we import a lot of our energy, and so that has added to our external imbalances and our dependence on overseas sources of energy.

We have the power to correct that through appropriate policies, and so a focus on energy policy and the tax treatment of energy is something that we can deal with. And it means that some people will pay more, and we have to deal with that. But that is an important ingredient in thinking about where we are going in the productive use of those resources.

Chairman CONRAD. All right. Dr. Johnson?

Mr. JOHNSON. So I also agree, Senator, with the broad outlines of what you put forward, but I would suggest putting it in a somewhat longer framework and actually talking about the repeated cycles or what the Bank of England now calls "doom loop," that we seem to be going through repeatedly. We had a big expansion in global credit in the 1970's, the debt crisis in 1982. Big expansion in loans to U.S. commercial real estate in the 1980's, the savings and loans crisis. Another emerging market crisis in the 1990's, 1997–98, and then we have a crisis based on U.S. housing.

Now, all the specific pieces that pushed us toward a bubble in housing are absolutely there, and I would agree with that. But this is not a housing-specific problem. This is a global financial sector issue. And monetary policy and fiscal policy get sucked in there. Well, fiscal policy probably should be pushing hard the other way, but it is not, for reasons you well understand. Monetary policy, though, as Senator Bunning alluded to, gets pulled into the cycle where you have a financial crash and there is the Greenspan put. You cut interest rates in order to reflate the economy, and nobody wants high unemployment, and it is very costly. So then you go out and you do it again.

Unfortunately, regulation over a 30-year period, as these cycles have continued, actually deteriorated in the United States and in some other key countries, particularly in Europe.

I think the Dodd-Frank legislation pushes us back some distance, but not far enough, in my view, and there is too much reliance on these international negotiations through the Basel Committee on capital standards, which we have already discussed. Those, in my assessment from many sources, are not going to deliver much by way of substantial change in the incentives here.

So that means we are going to run another version of the cycle. It will not be housing. It will be our banks. They will be at the center one way or another. It will be global probably, perhaps involving emerging markets. There will be big capital flows around. Again, fiscal policy should be leaning the other way and preparing for the worst. But, again, as we have been discussing, it is very hard even to agree that if we manage in a rosy, smooth-sailing kind of future, we cannot even agree on how to sort out the budget over a 15-year time horizon.

Chairman CONRAD. Dr. Naroff.

Mr. NAROFF. I think what you said is what economists say is a necessary but not sufficient condition for all the bubbles that were out there. It is a start. There is unquestionably—you had to have a lot of—all of what you said to create the bubbles. And it was not even limited to tax policy. It was not limited to regulation. If we just look at the tech bubble, which was largely a private sector bubble where there were massive amounts of private sector capital that got misallocated. And what concerns me is that it is really, I think, the structure and the functioning of the financial system whereby almost anything can be securitized and almost anybody can invest in almost anything at this particular point.

So while capital flows to the greatest return, it tends to flow to the greatest short-term return in a given period of time rather than the greatest long-term return. And I think that that is the implication that we have gotten from the bubbles that are formed here, that we are looking—you know, capital is flowing not in a long-term direction. We are looking for the shortest-term gains. It is the idea that, you know, universities can invest in energy futures as part of their endowments as a way to make money. You know, is this really a long-term investment that makes a whole lot of sense for a university to make in their endowments? But they do it because there is a rate of return there that they can take advantage of.

So, you know, while you can talk about all the things you have, I am not sure you get around it unless you deal with the way that the financial sector itself allows capital flow, and I am not sure how you do that without interfering with a lot of the good parts of the relatively free flow of capital that is out there.

Mr. BERNER. Could I answer that? Maybe it is because of where I sit that——

Mr. NAROFF. I was going to say Dick may disagree with my commission here, but go ahead.

Mr. BERNER. No, I do not disagree because obviously there is a balance. You know, the euphoria of creating credit and more leverage obviously creates economic activity, and it feels great while it is happening, but the point is there is a balance. And there is no handbook that gives us the exact number for that balance, but in financial institutions, you know, an appropriate level of capital that mitigates risk and that enables people to earn returns, that is where we can find that balance. In the financial system as a whole, we can find that balance. So does it make sense, just to pick housing again as an example, to lend money the way what we did? Obviously not.

If you look to the north and you look at the Canadian financial system, you see that they have a requirement where nobody gets a mortgage loan with less than 20 percent down. You can put up more than that if you would like, but, you know, while 20 percent is arbitrary, it is sensible. And so, you know, common sense I think tells you where the regulations ought to be without being too precise about them and to limit the amount of leverage. No leverage is not good because it stifles growth. Too much leverage has left us with the kind of——

Chairman CONRAD. Hangover.

Mr. BERNER [continuing]. Problems that we have. And while I did not come from New Hampshire, I grew up in New England, so that is where my values come from.

Chairman CONRAD. I grew up in North Dakota. I was raised by my grandparents. My grandfather said, "If you cannot put 20 percent down on a house, you have no business buying it."

Mr. BERNER. There you go.

Chairman CONRAD. Senator Gregg.

Senator GREGG. That was my amendment in Committee and it lost.

Chairman CONRAD. I supported it.

Senator GREGG. I wish you had been there, Doctor.

I just have one last question here. Dr. Johnson, you have on a couple of occasions, maybe three, mentioned Medicare as being one of the key elements of our long-term issues, and I think you alluded to the issue of how we deal with the technology and the expense of the last 6 months of life, for lack of a better term, which the Chairman has mentioned on numerous occasions.

Do you have any specific proposals in the Medicare area that could be useful to the financial commission that were not incorporated in the original bill, the health care bill?

Mr. JOHNSON. No, unfortunately. I think this is a tough—and I have spent time talking to leading health policy experts. I will share the names with your staff. There are obviously some indications, both within the VA system and within the private sector, Kaiser Permanente, for example, of health organizations that have really managed to get a grip on health care costs without severely or perhaps significantly compromising quality of care. But these experiments have proved very hard to replicate, and I think we do not actually understand how Kaiser Permanente, for example, in some instances has been so successful in cost control and not been able to replicate that within their own organization in other cities.

This is a very tough problem, and I am not saying there are at all easy solutions here. I wish that I had a magic bullet for you, but I do not.

Mr. BERNER. Actually, Senator, if I can interrupt there, there is, as you probably saw yesterday, the report from CMS that outlined the potential savings in Medicare that might come out of some of the changes that have been already proposed. But it seems to me, as important as Medicare is, I would point to the bigger problem of Medicaid, because Medicaid is the example of how our fiscal federalism is really broken. The States always come on the downturn to the Federal Government for assistance because the Medicaid rolls expand and because their revenues go down, and then you are asked to give them more assistance. So that system does not have permanence, it does not have stability over the longer term. If you think about Medicaid as a program, that is one that needs desperate attention.

More broadly, if you look in—Simon and I are both on CBO's commission, as I think Senator Bunning mentioned, advisory panel. If you look at in the CBO budget options book, you will see one big option that stands out, and I am sure you know what I am going to talk about, and that is, the tax treatment of health care benefits. And if we address that tax treatment in the broader context of our tax system and in the broader context of looking at health care, as difficult as I know that is, that is going to be something that both helps our deficit problem and changes the incentives for health care.

Senator GREGG. Well, you are actually talking to the choir on that point.

Mr. BERNER. I understand that.

Senator GREGG. I appreciate your time. You have been an excellent panel. Thank you.

Chairman CONRAD. Thank you very, very much, Dr. Berner, Dr. Johnson, Dr. Naroff. We very much appreciate the time and effort that you have extended and the assistance you have provided this Committee and this Senate. Thank you very much.

The Committee will stand adjourned.

[Whereupon, at 12:08 p.m., the Committee was adjourned.]

ASSESSING THE FEDERAL POLICY RESPONSE TO THE ECONOMIC CRISIS

WEDNESDAY, SEPTEMBER 22, 2010

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, DC.

The Committee met, pursuant to notice, at 10:09 a.m. in room SD–608, Dirksen Senate Office Building, Hon. Kent Conrad, Chairman of the Committee, presiding.

Present: Senators Conrad.

[presiding], Nelson, Stabenow, Begich, Gregg, and Sessions.

Index: Senators Conrad, Nelson, Stabenow, Begich, Gregg, and Sessions.

OPENING STATEMENT OF HON. KENT CONRAD, U.S. SENATOR FROM NORTH DAKOTA

The CHAIRMAN. First of all, I want to apologize. I was just on a lengthy call with the Vice President on other matters, and it was something that had to be dealt with because he is about to get on a plane. So I apologize.

But I want to welcome everyone to the Budget Committee. Today's hearing will focus on the Federal Government's response to the economic crisis. We will examine the effectiveness of the Federal response and what lessons have been learned.

Our witnesses are Dr. Alan Blinder, professor of economics and public affairs at Princeton and the founder and co-director of the Center for Economic Policy Studies. Welcome, Dr. Blinder.

Dr. Mark Zandi, the chief economist at Moody's Analytics, a good friend. Welcome. Good to have you here. Dr. Zandi has been to North Dakota at my invitation.

Dr. John Taylor, is a professor of economics at Stanford and a senior fellow in economics at the Hoover Institution. We are delighted that you are here as well, sir. I am a proud graduate of Stanford myself.

This is a really distinguished panel. I don't think we could have done better in terms of having a diversity of views, and we welcome you all and your testimony.

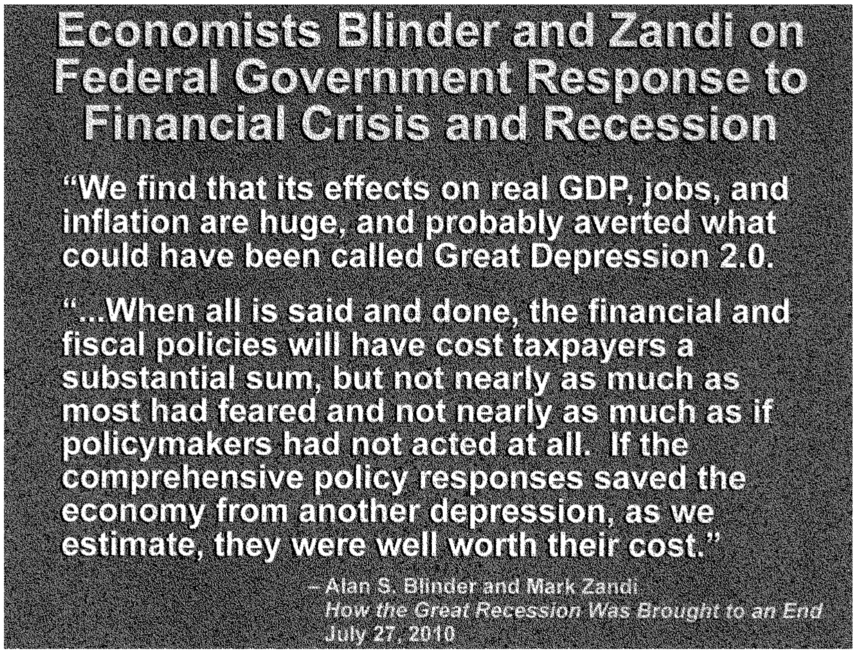
I would like to begin by highlighting the two challenges confronting our Nation—the near-term economic weakness and the longer-term budget crunch and the need to get to focusing like a laser on our long-term debt. In considering the near-term challenge, it is important to remember the crisis we faced just 2 years ago. By mid to late 2008, we were in the midst of the worst recession since the Great Depression.

The economy contracted 6.8 percent in the fourth quarter of 2008. Unemployment was surging, with 800,000 private sector jobs lost in January of 2009 alone. A housing market crisis was rippling through the economy, with home building and home sales plummeting and record foreclosures. Much of that still remains with us. And we faced a financial market crisis that threatened to set off a global economic collapse. Credit markets and lending were largely frozen.

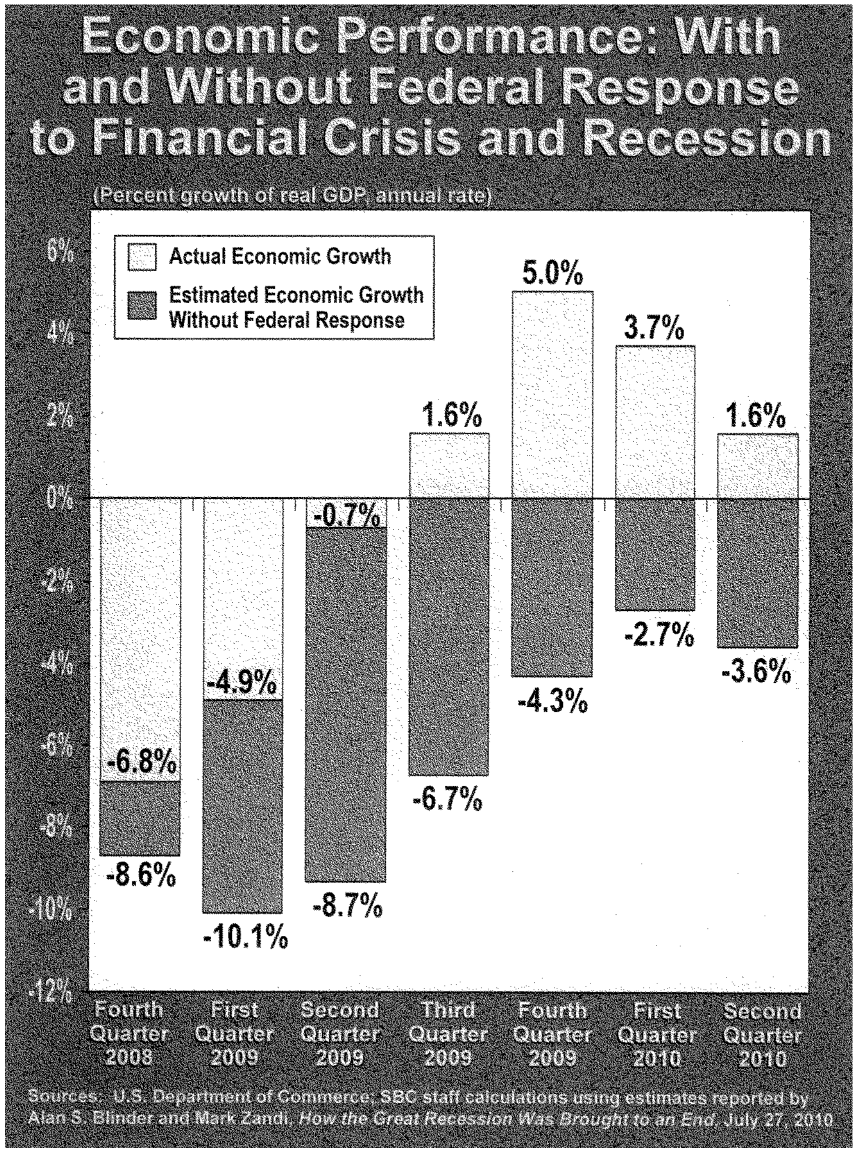
We have come a long way since then. The Federal response to the crisis, I believe, has successfully pulled the economy back from the brink, and this year, we have begun to see a return to economic and job growth, although much weaker than I think all of us would like to see.

The key elements of the Federal response included actions by the Federal Reserve. Efforts to stabilize the financial sector started with the Bush administration and continued in the Obama administration, and then we had last year's economic recovery package as well.

Two of our witnesses, Dr. Blinder and Dr. Zandi, have completed a study that measures the impact of that Federal response. To quote their report, they say, "We find that its effects on real GDP, jobs, and inflation are huge and probably averted what would have been called Great Depression 2.0. When all is said and done, the financial and fiscal policies will have cost taxpayers a substantial sum, but not nearly as much as most had feared and not nearly as much as if policymakers had not acted at all. If the comprehensive policy responses saved the economy from another depression, as we estimate, they were well worth their cost."



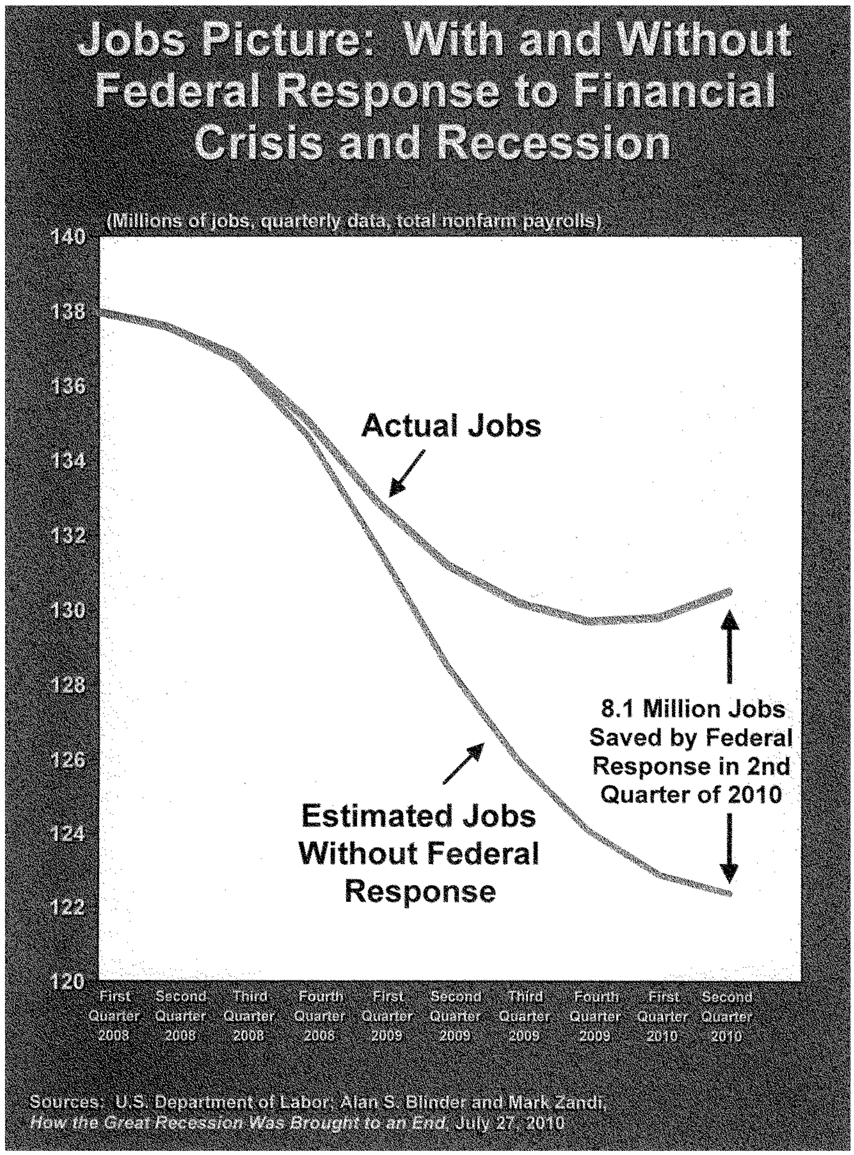
The next slide compares the economic growth we have actually experienced recently with an estimate of the economic growth we would have experienced without the Federal response. I would note that the estimates of economic growth without the Federal response have been updated by Budget Committee staff to reflect revisions in the actual economic growth that were released after Dr. Blinder and Dr. Zandi submitted their report.



As you can see depicted in the yellow bars, actual economic growth in the fourth quarter of 2008 was a negative 6.8 percent. By the last quarter of 2009, economic growth had improved to a positive 5 percent. Growth has continued but has slowed, falling to 1.6 percent in the second quarter.

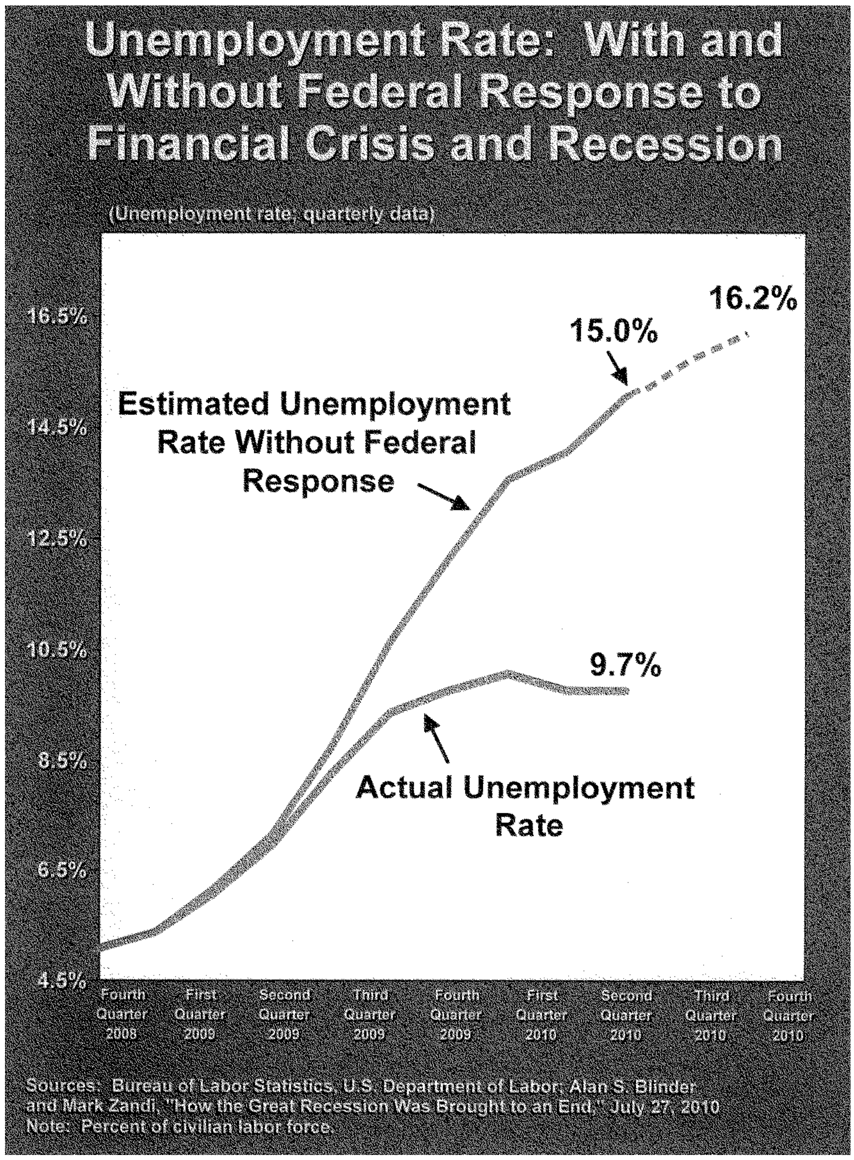
In contrast, as you can see in the red bars, without the Federal response, the economy would have contracted far more sharply, as much as 10.1 percent in the first quarter of 2009, and we would never have returned to positive economic growth during this time period.

The next slide shows the job picture following a similar trajectory. The green line on this chart depicts the actual number of jobs in our economy. We can see that in the first two quarters of 2010 the number of jobs has begun to increase again.



The red line shows Dr. Blinder and Dr. Zandi's estimate of the number of jobs we would have had without the Federal response. According to their findings, we would have had 8.1 million fewer jobs in the second quarter of 2010 if we had not had the Federal response.

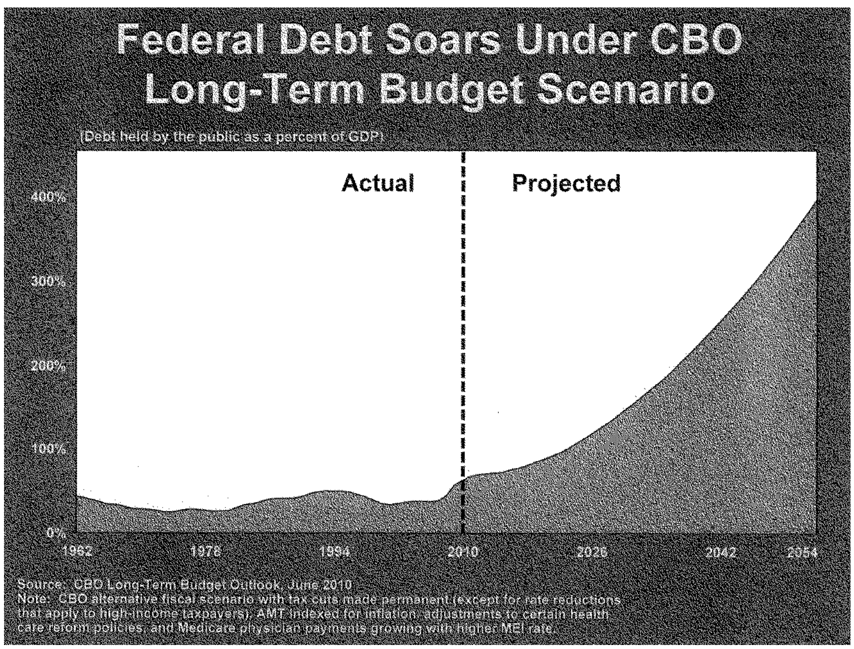
We see a similar picture in the unemployment rate. The green line on this chart shows the actual unemployment rate on a quarterly basis now hovering about 9.7 percent, still far too high. We have got to do more to create jobs, bring this rate down. But according to Dr. Blinder and Dr. Zandi, if we had not had the Federal response, the unemployment rate would now be 15 percent and would continue rising to 16.2 percent by the fourth quarter of 2010.



So, clearly, the Federal response to the economic crisis has had and continues to have a significant positive effect, but we are clearly not out of the woods yet. The economy remains unsteady and faces strong head winds. That is why in the near term, probably in the next 18 to 24 months, I believe we need to focus on providing additional liquidity to boost demand. We can't afford to repeat the mistake of the mid 1930's, when recovery measures were curtailed too quickly and the depression was prolonged.

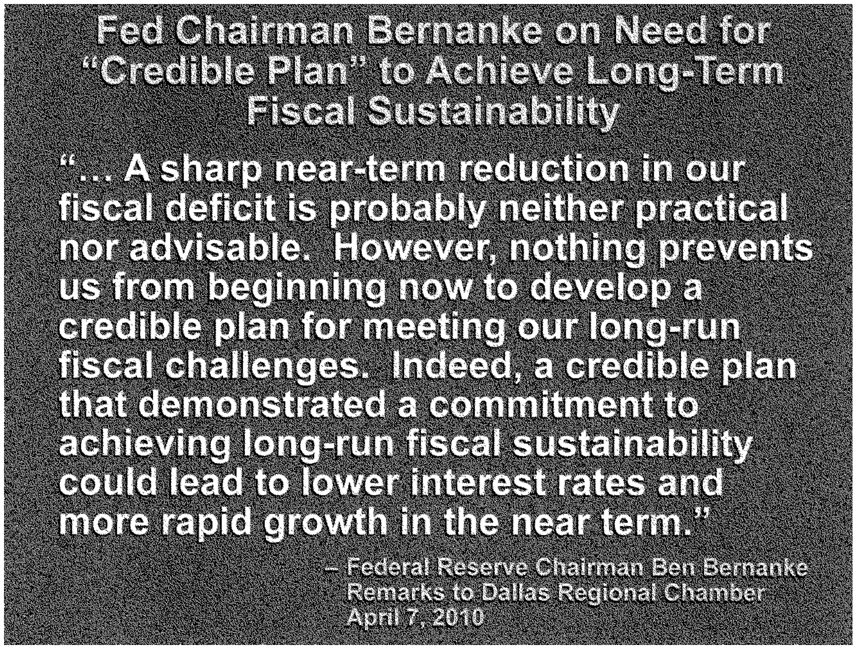
Now let me be clear. That does not mean that we should be ignoring the looming budget crisis. Because the debt is the long-term threat, it must be confronted and it must be dealt with. The impacts on Federalspending from the retirement of the baby boom generation, rising healthcare costs, and our outdated and inefficient and noncompetitive tax system all need to be addressed. We need to face up to exploding deficits and debt.

According to CBO, Federal debt could rise to almost 400 percent of GDP by 2054. Of course, that would be 40 years from now. Nevertheless, that is a completely unsustainable course.



What we should be doing now is putting in place deficit reduction policies that will kick in after the economy has more fully recovered, but very soon. And by establishing and enacting those policies now, we will reassure financial markets that the United States is confronting its long-term fiscal imbalances.

This is what Federal Chairman Bernanke said earlier this year about the need for a credible plan to address the long-term fiscal imbalance, and I quote, "A sharp near-term reduction in our fiscal deficit is probably neither practical, nor advisable. However, nothing prevents us from beginning now to develop a credible plan for meeting our long-term fiscal challenges. Indeed, a credible plan that demonstrated a commitment to achieving long-term fiscal sustainability could lead to lower interest rates and more rapid growth in the near term."



I completely agree. That is why the work of the President's fiscal commission is important. As a member of that commission, I can attest to the serious work that is being done there. Senator Gregg, of course, serves on that commission as well.

I remain hopeful that we will come up with a serious and credible plan to face up to our long-term deficits and debt. The steps that must be taken will not be easy, but they will pay significant dividends for this country.

I turn to Senator Gregg now for his opening comments. And again, I want to apologize for starting this hearing late. I don't think in the time I have been chairman that has ever happened. But I apologize to Senator Gregg and my colleagues and the witnesses as well.

STATEMENT OF HON. JUDD GREGG, U.S. SENATOR FROM NEW HAMPSHIRE

Senator GREGG. Thank you, Mr. Chairman.

We certainly understand that you had other issues which had to be addressed.

Let me associate myself, of course, with the second half of your comments, as I have on many occasions, and your concern about the long-term deficit and debt of this country. And it is, as you have described, critical that we address this.

On the first half, though, I have to kindly disagree. You have attempted to put lipstick on a pig. The fact is that the Federal response in this area has been woeful, misdirected, and, unfortunately, has probably aggravated the problem, in my opinion, rather than assisted the issue.

I had an economics professor when I was at Columbia, who tolerated my appearing in his class on occasion, named Raymond J. Saulnier. I also had the good fortune to have a fellow named Arthur Burns as an economics professor. And Raymond J. Saulnier had this wonderful saying. He said sometimes you have got to evaluate problems by looking at what is intuitively obvious and reaching a conclusion.

And what is intuitively obvious here is that the stimulus package was misdirected. It was a massive expansion in deficit and debt, which has energized some economic activity, but which basically ended up being walking around money for a group of appropriators here in the Senate. And I am an appropriator. So I say that with some generosity.

But the fact is that the money was spent out over too much time, and it was not focused on capital formation. It was not focused on immediate return in the economy. And so, to the extent a stimulus should have occurred, it was a misdirected stimulus, in my opinion.

And you can look at whatever models you want, but the fact is that the unemployment rate has not come down. It has gone up. And the unemployment rate does not appear to be coming down in the future at any significant rate or at least consistent with most recoveries.

And why is that? Well, I believe it goes to the second part of your hypothesis, which is that the American people, and especially the folks on Main Street who create the jobs in this country, are looking at our Government and saying it isn't part of the solution. It is the problem. It is the concern for them.

I have traveled throughout my State. I know you have in North Dakota. Every small business person I talk to is just worried to death about their coming costs in healthcare, just worried to death about it.

You know, I was talking to a guy just a couple of weeks ago—last week, actually—last weekend, and he had a business that generates $2 million to $3 million a year. He is worried that he is going to have to pay $400,000 to $500,000 in new healthcare costs. He doesn't know where he is going to get the money. But he knows he is not going to expand until he figures it out.

On top of that, you have got the financial regulatory bill which passed, which is forcing a contraction in credit across this country because it was misdirected in the way it addressed the fundamental underlying issue, which is real estate and how we deal with real estate. Instead of setting up a responsible approach toward down payments, it basically created a massive regulatory overstructure, which is going to cause contraction in the short term as the credit markets try to adjust to it.

You couple that with the tax policy, which is—the Senator from North Dakota has correctly disagreed with—the idea that we should raise taxes in this economy is not a good idea. And yet that appears to be the thing that we may end up doing because that is the policy of the presidency, and that is causing people to have uncertainties about their future, their economic future.

And then you throw on top of that this whole debt issue and the fact that most Americans look at this and they apply this test of intuitive—what is intuitively obvious, and they say it is intuitively obvious that we can't support our debt or our deficits, and there doesn't appear to be a plan to straighten it out. And so, they are worried. They are worried about the future of this country. They are afraid we are going to pass on a less prosperous nation than they have lived in and a less secure nation as a result of it.

So my view is that in order to get the employment issue under control, we have to get the long-term problems that this Government is creating for the markets under control and for the guy or woman on Main Street who wants to create a job under control. We have to allow that person to be willing to go out and expand their business and take a risk without fearing that the Government is going to make it economically unfeasible for them to succeed either because of the costs which are being put on through regulatory burden or healthcare cost or because of the fear of taxes or because of the burden of the Government simply running up a debt it can't afford and knowing that that price is going to have to be paid by the productive sector of the economy.

And that is intuitively obvious through inspection, and that is what we need to address.

Senator NELSON. Mr. Chairman?

The CHAIRMAN. Senator Nelson?

Senator NELSON. I have to leave to go to a meeting, and I will be back. But in light of what both you and the ranking member have said, what is extremely important right now is the two of you and your deliberations in this deficit reduction commission. Can you give us a brief progress report of how that is going? And do we really have any hope when we come back in a lame-duck session that we can pass a package that will seriously address the deficit?

The CHAIRMAN. I would just say quickly in response to the Senator's inquiry, the commission is working in a very serious, deliberative way. You know, I don't think anyone knows at this point if 14 of the 18 of us can agree on a plan because that is a requirement. If 14 of 18 of us can agree, that plan will come to a vote before the end of the year in the Senate and the House.

I am hopeful, but we have not gotten to the point of considering options. We don't have a plan. So it is impossible to say at this point whether there would be agreement on a plan.

But I am encouraged by the seriousness of the membership of this commission—six from the Senate, equally divided Republican and Democrat; six from the House, evenly divided Republican and Democrat; six appointed by the President, four Democrats, two Republicans. I think the membership of the commission really recognizes the seriousness of the responsibility that has been given to them.

Senator Gregg?

Senator GREGG. I would second the Senator's statement. There is a seriousness of purpose amongst all the commissioners. And I think we all appreciate the fact that it is critical that we put forward a product that is substantive and that the American people and the world markets will look at as a step in the direction of fiscal responsibility.

But we are at 10,000 feet, and when you get down on the ground and put the details together, that is where the problems are, as the Senator from Florida certainly knows. But there is a real effort to try to do that.

The CHAIRMAN. I thank the Senator for his inquiry. I thank Senator Gregg for his response.

Let us go to the witnesses, and we will start with Dr. Blinder.

STATEMENT OF ALAN S. BLINDER, PH.D., GORDON S. RENTSCHLER MEMORIAL PROFESSOR OF ECONOMICS AND PUBLIC AFFAIRS, FOUNDER AND CO-DIRECTOR, CENTER FOR ECONOMIC POLICY STUDIES, PRINCETON UNIVERSITY

Dr. BLINDER. Mr. Chairman, Ranking Member Gregg, members of the committee, I would like to thank you for holding this hearing. I am going to confine my opening remarks to the historic subject of the hearing, the stated subject of the hearing—assessing the effects of the policies that were done in the past.

I am sure we will come to the longer-run budget shortly, and I would like to compliment both of you for trying to do the right thing on this. The problem, of course, as you perceive, is that nobody quite agrees what the right thing to do is—other than that the deficit should be a lot smaller than it is. And I, of course, agree with that, too.

Roughly 2 months ago, Mark Zandi and I published a paper, which you kindly cited several times, showing, among other things, the quite large estimated effects of the panoply of anti-recession and anti-financial-market-crisis policies that were promulgated and/or enacted in 2008–2009. Now, Mark is right here, and he will speak for himself. But in my view, the two of us wrote this paper for a quite simple reason, and it is this. That the public, and especially the political, debate over the policy responses seemed to us long on rhetoric, short on analytics, and, in many important ways, discordant with the facts.

In particular, both TARP and the Recovery Act were being branded as failures or worse, while we viewed them as successes, although not without flaws. In a politically charged atmosphere nearly devoid of quantitative appraisals—notable exceptions being some of the work of John Taylor, who is right here to speak about it—prejudice and assertion seemed in danger of being accepted as fact and reasoning. So it looked like there was a void to be filled.

The estimates that we produced have been subject both to unwarranted praise by those who liked them and unwarranted criticism by those who didn't. Many of these attacks have actually been methodological in nature. So even though this is not really the right forum for a technical disquisition—and I won't give one—I do want to say a few things about the methodology that we used.

Mark and I used a large-scale econometric model of the United States economy to estimate the effects of a long list of fiscal and financial policies. These models are complicated beasts, but for present purposes, there are only two important aspects.

One, they are statistical representations of the economy based on past history. That is what we have to go on. Two, at bedrock, they are complicated algebraic renderings of the simple textbook models that you probably learned in Economics 101, and certainly that I teach in Economics 101, though vastly more complicated in the details. A number of the criticisms derive directly from these two points.

Models of the sort that the two of us used are called "structural model" because they posit a structure of equations that allegedly describe the economy, and then they use real historical data to fill those equations with numbers. So they are not just conceptual frames, but they are actually numerical. By the nature of their construction, these estimated structural equations have to be tied closely to the data. If the models didn't fit past experience tolerably well, the equations wouldn't be there.

Nonetheless, such models have been criticized on a variety of grounds, including that economists don't know the true structure and that they don't handle expectations about the future very well. And our work inherited those generic criticisms, which do have some validity.

But when I think about this, I ask: What is the alternative? Some economists champion the use of purely statistical techniques that allegedly impose no structure at all but simply let the data speak for themselves. That might be a sensible approach when you are studying repetitive events that have happened many, many times in the past, but not when you are studying phenomenon that have never happened before, which we were.

It is true that models based on history might be poorly equipped to deal with events that are outside the range of previous experience. Statisticians call this "out of sample." The sensible version of this criticism warns against placing too much confidence in out of sample results, and we agree with that. But what, other than displaying appropriate modesty, is one to do about it?

The silly version of this criticism would ignore the discipline imposed by the data, which are the facts, and simply assert the answers based on a priori reasoning. That approach allows either ideology or technical fascination to triumph over admittedly fallible science.

Modern economic theory and econometrics offer a variety of alternatives to the brand of Keynesian economics that is embodied in the Moody's model that we used and in other models of that style. Some academics reject the Keynesian approach entirely for reasons that need not detain us here, though I think we will probably hear some of them in Professor Taylor's testimony. And that attitude has spawned several criticisms of our work as "old-fashioned."

Now, I must say that as I approach my 65th birthday, I feel compelled to say that old ideas are not necessarily bad ideas. The question should not be whether it is old-fashioned or newfangled, but whether it is close to a description of reality or far. As examples, I have noted in the testimony that both the Declaration of Independence and Adam Smith's invisible hand date from 1776. I count them both as very good ideas, but very old-fashioned.

Everyone agrees that all statistical models are fallible. So it is incorrect to say, as some of our supporters have, that Mark and I have "proven" or "demonstrated" that these policies had large effects. No, that is not right. We just estimated the effects to be large with a statistical representation of the U.S. economy. Other such representations would give different estimates, as thoughtful critics such as John Taylor have pointed out.

One last methodological point. Some critics have argued that the counterfactual that we used in our thought experiment, which was what would have happened with no policy responses at all—just laissez-faire—is either unrealistic or uninteresting, a kind of a straw man. We disagree with that criticism.

In fact, every single policy initiative on that lengthy list of Table 1 in our paper had opponents who argued strenuously against it. In fact, one of them is sitting right here two seats to my left pretty much, and you will hear from John Taylor shortly.

That brings me to current policy, very briefly. The recovery looks to be sputtering right now. Recent data may prove to be nothing more than one of those pauses that happen now and then during recoveries. I hope so, but I fear they may indicate something worse.

I want to be clear. I am less worried about the feared double-dip recession, which doesn't look likely, than I am about the prospect that GDP growth will continue to undershoot capacity growth, widening the GDP gap instead of narrowing it, and that does look realistic, unfortunately.

My conclusion is that monetary and fiscal policy should be spurring growth right now. Given the parlous state of the budget, it seems natural to rely on monetary policy, and we heard from the Federal Open Market Committee yesterday that they are certainly thinking in that direction. But if the Fed can't or won't do much more to spur growth, then I think Congress should.

Now I realize that this committee is properly concerned about the budget deficit, as it should be. You all know that we are now on an unsustainable long-run fiscal path. But the deficit does not pose a short-run problem. The Treasury is now borrowing huge sums of money at extremely low interest rates, and it can borrow more. Today, I believe the jobs deficit is more urgent than the budget deficit.

That said, the days of what I like to call the "Field of Dreams" strategy are over. The "Field of Dreams" strategy is build a bigger GDP, and the jobs will come. And that is the way we usually think about fiscal policy.

Unfortunately, the "Field of Dreams" strategy has two serious drawbacks in the present situation. The first is obvious. It is working very slowly because firms are extremely reluctant to hire, for whatever reasons. Second, it is expensive, costing in the neighborhood of $100,000 of either government spending or tax cutting for every job that is saved or created. We need to do this job cheaper, given the state of the budget.

To me, those two considerations point toward two policies, and I will finish by mentioning them. One is a substantial broadening of what Congress did earlier this year with the HIRE Act, a temporary tax credit for new jobs. The other is also temporary: public employment centered on relatively low wage workers.

Simple calculations suggest that either of those options or both can create jobs with a price tag in the $30,000 to $40,000 per job range, not $100,000 per job. And given where we are and where we have been, that seems like a pretty good deal to me.

Thank you all for listening.

[The prepared statement of Dr. Blinder follows:]

Testimony of
Alan S. Blinder
Gordon S. Rentschler Memorial Professor of Economics and Public Affairs
Princeton University
to the
Senate Budget Committee
September 22, 2010

Mr. Chairman, Ranking Member Gregg, and members of the Committee, I'd like to thank you for holding this hearing.

The Blinder-Zandi study

About two months ago, Mark Zandi and I published a controversial paper which estimated, among other things, that in the absence of the extraordinary policy measures taken in 2008 and 2009, there would be about 8½ million fewer jobs today, and we would be experiencing deflation.[1] Mark Zandi is here to speak for himself, but in my view, the two of us wrote the paper for a simple reason: The public, and especially the political, debate over the policy responses seemed long on rhetoric, short on analytics, and discordant with the facts. In particular, both TARP (the "Troubled Assets Relief Program") and the Recovery Act (ARRA--the "American Restoration and Recovery Act") were being branded as failures, or worse, while we viewed them as successes—albeit not without flaws. In a politically-charged atmosphere nearly devoid of quantitative appraisals,[2] prejudice and assertion seemed in danger of being accepted as fact and

[1] Alan S. Blinder and Mark Zandi, *How the Great Recession Was Brought to an End*, July 27, 2010.

[2] A few exceptions: The CBO had estimated the effects of the Recovery Act, and John Taylor had written several papers critical of both the fiscal and monetary stimulus. See CBO, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from January 2010 Through March 2010*, May 2010; and John B. Taylor, *Getting Off Track* (Stanford: Hoover Institution Press), 2009; "The Lack of an Empirical Rationale for a Revival of Discretionary Fiscal Policy," *American Economic Review Papers and Proceedings*, May 2009, pp. 550-555); and others.

reasoning. It looked like there was a void to be filled and, judging by the volume of reactions to our study, there was.

Let me say, first, that while our study is widely viewed as a defense of the policies that were followed, we neither stated nor implied the Panglossian view that these policies were the best that could have been devised. In fact, we don't believe that, and both of us said so while the policies were being debated. Our paper claims only that they helped cure the financial stress, mitigate the recession, and hasten the recovery. Helped a lot, according to our estimates.

These estimates have been subject to both unwarranted praise and unwarranted criticism. Many of the attacks on our work are methodological in nature. (Many others are ideological.) So, even though this is neither the time nor the place for a technical disquisition, I want to say a few things about *methodology*. But I'll stick to plain English.

Zandi and I used a large-scale econometric model of the U.S. economy (the Moody's Analytics model, built and maintained by Mark Zandi) to estimate the effects of a lengthy list of fiscal and financial policies.[3] Such models are complicated beasts, but for present purposes only two aspects are important:

1. They are statistical representations of the economy *based on past history*.
2. At bedrock, they are complicated algebraic *renderings of the simple textbook models* that people like me teach in Economics 101.

A number of criticisms derive directly from these two points.

Models of the sort Zandi and I used are called "structural." They posit a *structure* of equations to describe the economy, including the channels through which policies might work, and then use *real historical data* to fill those equations with numbers. By the

[3] The list appears in Table 1 of our paper.

nature of their construction, these estimated structural equations are tied closely to the data. If the equations didn't "fit" past experience, they wouldn't be in the model.

Nonetheless, such models have been criticized on a variety of grounds—including that economists don't know the true structure, that policy interventions might change it, and that they don't handle expectations about the future very well. Our work inherited these generic criticisms, which have some validity. But what is the alternative? Some economists champion the use of purely statistical techniques that (allegedly) impose no structure at all, but simply "let the data speak for themselves." That may be a sensible approach when studying repetitive events, but not when studying phenomena that have never happened before.

It is true that models based on history may be poorly equipped to deal with events that are outside the range of previous experience--"out of sample," as statisticians put it. The sensible version of this criticism warns against placing too much confidence in out-of-sample results, and we agree. But what, other than displaying appropriate modesty, is to be done about it? The silly version of this criticism would ignore the discipline imposed by the data—*by the facts*--and simply *assert* answers based on *a priori* reasoning. This approach allows either ideology or technical fascination to triumph over (admittedly fallible) science.

Modern economic theory and econometrics offer a variety of alternatives to the brand of Keynesian economics embodied in the Moody's model and others. Some academics reject the Keynesian approach entirely--for reasons that need not detain us here—and that attitude has spawned several criticisms of our work as "old-fashioned." As I approach my 65th birthday, I feel compelled to point out that *old* ideas are not necessarily *bad* ideas. For example, both Adam Smith's invisible hand and the Declaration of Independence date from 1776.

Everyone agrees that all statistical models are fallible. So it is incorrect to say, as some of our supporters have, that Zandi and I have "proven" or "demonstrated" that the policies had large effects. No, we just *estimated* the effects to be large. Other empirical models might give quite different estimates, as thoughtful critics such as John Taylor have pointed out. That is precisely why we wrote, in the last sentence of our Executive Summary, that "we welcome other efforts to estimate these effects." We do.

One final methodological point: Some critics have argued that the counterfactual in our thought experiment ("What would have happened if there had been no policy responses at all?") is unrealistic or uninteresting--a kind of straw man. We disagree. In fact, every single policy initiative had opponents who argued strenuously against it. In fact, one such person is right here on the panel with us. If *laissez faire* is a straw man, there are plenty of straw men in America.

Which brings me to current policy.

Current policy

The recovery looks to be sputtering right now. Recent data may prove to be nothing more than one of those "pauses" that happen now and then during recoveries. I hope so, but I fear they may indicate something worse. Frankly, I'm less worried about the feared "double dip" recession than about the prospect that GDP growth will continue to undershoot potential. Starting from such a deep hole, we need to keep growth *well above* potential for a protracted period, for only that will reduce the unemployment rate over time. If potential GDP growth exceeds 3%, as I suspect, then actual GDP growth must exceed 4%, which doesn't seem to be on offer.

My conclusion is that monetary and fiscal policy should be spurring growth right now. Given the parlous state of the budget, it may seem natural to rely on monetary policy. The problem here, as I wrote in a recent *Wall Street Journal* column, is that the Federal Reserve has done so much already that it is down to relatively weak instruments.[4] Besides, the Federal Open Market Committee is so divided that it may not deploy even those.[5] If the Fed can't or won't do much more to spur growth, Congress should.

Now, I realize that this Committee is concerned about the budget deficit, as it should be. You all know that we are on an unsustainable *long-run* path that will require, for its correction, both more revenue and less spending down the road. But the deficit does *not* pose a *short-run* problem. The Treasury is now borrowing huge sums of money at extremely low interest rates. It can borrow more. Today, the jobs deficit is more urgent than the budget deficit.[6]

That said, the days of what I call the "Field of Dreams" strategy--*build a bigger GDP, and the jobs will come*—should be over. It's a sensible strategy in many contexts, but it has two serious drawbacks in the present situation. First, it is working very slowly because firms are so reluctant to hire. Second, it is expensive—in the neighborhood of $100,000 of government spending or tax cut for each new job saved or created. America needs more jobs *now*, and because of the large budget deficit, we need them *cheaper*.

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[4] Alan S. Blinder, "The Fed Is Running Low on Ammo," *The Wall Street Journal*, August 26, 2010, A15.
[5] See Jon Hilsenrath, "Fed Split on Move to Bolster Sluggish Economy," *The Wall Street Journal*, August 24, 2010 and Ben S. Bernanke, "The Economic Outlook and Monetary Policy," remarks at the Jackson Hole Symposium, August 27, 2010.
[6] I do not mean to exclude enacting *now* budget reforms that will bring down the deficit *in the future*. Doing so might even increase spending now.

To me, those two considerations point toward two policies. One is a substantial broadening of what Congress did earlier this year with the HIRE ("Hiring Incentives to Restore Employment") Act: a temporary tax credit for new jobs. The other is temporary public employment centered on relatively low-wage workers. Simple calculations suggest that each of these options can create new jobs at a price tag of $30,000-$40,000 each. Given where we are and where we've been, that seems like a pretty good deal to me.

I have been advocating these two policies all year, though not to much avail.[7] But I haven't changed my mind. I still think they are the right things to do.

Thank you for listening.

[7] See Alan S. Blinder, "Getting the Biggest Bang for Job-Creation Bucks," *The Washington Post*, February 19, 2010, p. A17.

The CHAIRMAN. Thank you.
Dr. Zandi, welcome.

STATEMENT OF MARK ZANDI, PH.D., CHIEF ECONOMIST, MOODY'S ANALYTICS

Dr. ZANDI. Thank you, Senator Conrad, Senator Gregg, and the rest of the committee, for the opportunity to speak today. My remarks are my own and not those of the Moody's Corporation.

I am going to make three points in my time. Point No. 1, I believe that the policy response to the economic crisis was very successful. I think the merits of any individual aspect of the policy response—and of course, there were many—are debatable. If I were king for the day, I probably would have designed it differently myself. But the totality of the response was very impressive. And without that response, I think it is fair to say we would have suffered a 1930's-style Great Depression, and that is borne out in the results that Alan and I came together on in our study.

Broadly speaking, the policy response had two objectives. The first objective was to stabilize the financial system, and the second was to jumpstart an economic recovery.

In terms of stabilizing the financial system, let me focus on three particular aspects of the response, and I am going to illustrate it in the context of the spread between—the interest rate spread between 3-month LIBOR, which is the interest rate that banks charge each other for borrowing and lending to each other, and Treasury bill yields. This is the so-called TED spread. It is a very good measure, perhaps the best measure of the angst in the financial system, the banking system. And you can see prior to the beginning of the crisis back in early 1907, it was running around 20, 25 basis points, which is where we are today.

And you can see the increase that occurred as the financial crisis gained steam. And then in the wake of the Lehman failure, the Fannie and Freddie takeover, it gapped out, peaking in October, early October at just under 500 basis points, 5 percentage points.

Three key policy responses stemmed this financial panic and stabilized the system. A first was the Capital Purchase Program, which was the bank bailout, which was funded by TARP. The peak was $250 billion. That has been a slam-dunk success. Taxpayers are making money on the deal. The banking system is intact. Banks are lending to each other and beginning to lend to businesses and consumers.

Without that capital from the Capital Purchase Program, which again was funded by TARP, the banking system would have collapsed, and the result would have been devastating.

The second policy step I would like to point to is the FDIC's Temporary Liquidity Guarantee Fund, and you will note that on the precise day that that fund was implemented—October 13th—that is the precise day that this TED spread hit its apex. This program was guaranteeing bank debt issuance. This addressed the liquidity problem in the banking system. Banks could issue debt. The liquidity problem faded very rapidly. The banking system found its bearings.

And then the third policy step that I would like to point to would be the bank stress tests that were conducted in the spring of 1909, the results of which were publicly announced on May 7th. And you can see that they were very successful and put an end to the financial crisis, and you will note that the TED spread is now back to where it was prior to the crisis. The financial system has stabilized. I don't think there was any possible way that could have happened without the policy response.

With regard to fiscal stimulus, in my view, it is no coincidence that the recession ended, the great recession ended precisely when the stimulus was providing its maximum economic benefit. The NBER, the National Bureau of Economic Research, told us earlier this week the recession ended in June of 2009. That is the precise month in which the stimulus spend-out was at its maximum, when the temporary tax cuts and spending increases were at their maximum, that precise month. It is no coincidence of the timing of this. The turnaround in the economy occurred exactly when the stimulus was providing its maximum benefit.

Now, of course, the stimulus has many different moving parts. Some have worked better than others. I just want to mention one other, and that is the Cash for Clunkers. That was very successful. It ended a freefall in that very key industry, and it is very clear in this slide. You can see here this shows industrial production in the motor vehicle industry. That is the orange line, left-hand scale. And employment in the motor vehicle industry. That is the green line, right-hand scale.

You can see the complete freefall in production that occurred during the recession. The precise bottom in production in jobs in the motor vehicle industry was August of 2009. That was the precise month in which Cash for Clunkers was in full swing. It is no coincidence. Cash for Clunkers worked. It is a very good example of a good program—very cheap, $3 billion—that was very effective, and many of the other aspects of the stimulus were as well. So, in my view, point No. 1, the policy response was incredibly successful.

Point No. 2, the recovery is intact. It is now over a year old, but it is very fragile. Growth has slowed. GDP growth, which has been 3 percent over the past year, is now tracking about half that—1.5 percent in Q3. That is still growth, but it is insufficient to forestall a further increase in unemployment. Unemployment will rise. The unemployment rate is 9.6 percent. I expect it to drift back closer to double digits by year's end or early next.

It should be no surprise that the recovery is a fragile recovery. Very well respected research has shown that in previous examples where countries have gone through financial crises like the one we have experienced, recoveries are difficult. They are not easy, largely because of the deleveraging that has to occur in the economy. People have to reduce their debt loads. Businesses and consumers have to deleverage, and in that process, it is a significant weight on economic growth.

Moreover, it is not surprising that the benefit of the fiscal stimulus is fading. That is by design. The stimulus had its maximum impact back last summer or late last year, early this. The stimulus spend-out is now going back to zero unless Congress does more, and thus, you are going to see economic growth slow. So it should be no surprise.

The slowdown has been more than I would have anticipated. In my view, that is largely the result of the European debt crisis, which undermined confidence at a critical juncture. We created 400,000 private sector jobs in April and May of this year. The European debt crisis hit in May and June. The stock market fell 15 percent. It knocked the wind out of business confidence, and hiring has stalled out. So that was something that no one expected. And it didn't derail the recovery, but it certainly has sidetracked the economic recovery.

Finally, point No. 3, if one believes that the policy response was effective, and moreover, if one believes that the recovery is still too fragile, point No. 3 is that policymakers must remain aggressive. They should not exit out. At the very least, they should not exit out of their policy support for the economy until the recovery has engaged in a self-sustaining economic expansion. And my definition of that is a steadily consistently falling unemployment rate. Until that happens, I think it would be imprudent for policymakers to pull back.

Let me quickly name, articulate three things that I would do in the very immediate term. First is decide what we are going to do about the expiring tax cuts. That uncertainty, I agree with the Senator, the policy uncertainty is a problem. The tax cuts, the uncertainty with regard to the tax cuts is a problem. We have got to nail that down.

I would not raise anyone's taxes in 2011. The recovery is just too fragile. 2012, 1913, I don't think—when the economy is on sound ground, I think it is reasonable to allow the tax rates in upper-income households to rise. I think we need to address our long- term fiscal problems, and that has got to be at least part of that solution.

Second, one easy thing that could be done is to require Fannie Mae and Freddie Mac to be more aggressive in facilitating mortgage refinancing. One of the ways the Federal Reserve is trying to help support the economy is to keep mortgage rates at record lows. The key link between those low rates and the economy, the most direct, fast key link is refinancing. That is disturbingly low, given the low rates. This can be easily facilitated. I would be happy to go into how that could be done if you care to go down that path.

And then, finally, the third thing I would do, I would endorse a proposal that Alan gave. If we get into early next year and the recovery is not engaging and we are still struggling, I would advocate a payroll tax holiday targeted at companies that hire and add to their payrolls. The HIRE Act was insufficient. It was too small. It was too restrictive. It is not working. It could be quite effective if we did it in a better way, and I think that would be very important for our recovery next year.

Thank you.

[The prepared statement of Dr. Zandi follows:]

Testimony of Mark Zandi
Chief Economist, Moody's Analytics

Before the Senate Budget Committee

"Assessing the Federal Policy Response to the Economic Crisis"

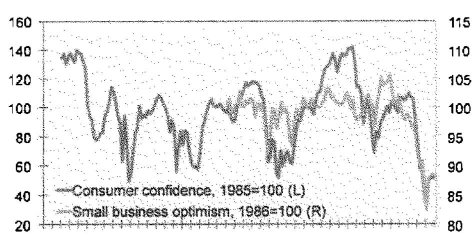
September 22, 2010

The U.S. economy has made enormous progress since the dark days of the Great Recession. Less than two years ago, the global financial system was on the brink of collapse and the U.S. was suffering its worst economic downturn since the 1930s. At its worst, real GDP was in free fall, declining at nearly a 7% annual rate, and job losses were near 750,000 per month. Today, the financial system is operating much more normally, real GDP has advanced by 3% during the past year, and job growth has resumed, albeit at an insufficient pace.

This dramatic turnaround was largely the result of an aggressive and unprecedented response by monetary and fiscal policymakers. The Federal Reserve Board effectively cut interest rates to zero and took a number of steps to help credit flow through the financial system. The Treasury Department required the nation's largest bank holding companies to conduct public stress tests. The FDIC increased deposit insurance limits and guaranteed bank debt. Congress and the Bush administration passed the Troubled Asset Relief Program, creating a fund that was ultimately used to support the banking system, the auto industry and the housing market. Under both the Bush and Obama administrations, Congress passed fiscal stimulus efforts ranging from expanded unemployment benefits to state and local government aid to tax cuts for businesses and households. While the effectiveness of any individual aspect can be debated, there is no question that the overall policy response has been very successful.

Despite the enormous economic progress, however, the recovery remains fragile. Retailing, housing, business investment and industrial activity have all been throttled back since the spring. Real GDP in the current quarter is growing at less than a 2% annualized rate, well below the economy's growth potential.[1] The job market's progress has also stalled. Discounting temporary federal hiring for the U.S. census, only about 75,000 jobs are being added on average per month. About double that pace of growth is necessary to stabilize the unemployment rate, given even modest assumptions about labor force growth. After rising to 9.6% in August, the unemployment rate is likely to drift further towards double digits in coming months. Consumer, business and investor confidence also remain extraordinarily fragile. According to nearly all surveys of sentiment, the panic that prevailed during the Great Recession has abated, but attitudes remain much darker than anything experienced even at the bottom of previous downturns (see Chart 1).

Chart 1: A Dark Mood

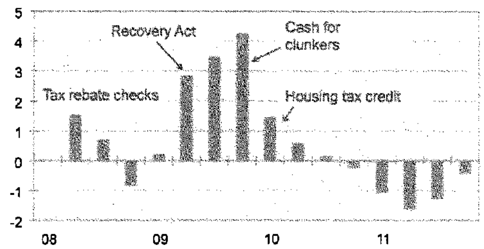


Sources: Conference Board, NFIB, Moody's Analytics

It is not surprising that the economy's growth has slowed in recent months, but the degree to which it has slowed was not anticipated. Not unexpectedly, the benefit of the fiscal stimulus has begun to fade. The stimulus provided its maximum boost to growth during the second half of 2009 and early 2010 (see Chart 2). Indeed, it is no coincidence the recession ended last summer, when the stimulus was providing its maximum economic benefit via the temporary tax cuts and increases in government spending. There was very little stimulus spending in the first quarter of 2009, when the Recovery Act was passed, but by the second quarter, nearly $100 billion was being provided to the economy. This change jump-started the recovery. Stimulus spending has now begun to decline, and the economic benefit is fading fast. Without further policy help, this will become a meaningful drag on the economy in 2011.

Chart 2: Economic Boost From Fiscal Stimulus Fades

Contribution to real GDP growth, %

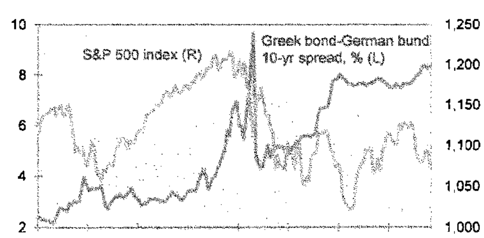


Source: Moody's Analytics

The boost to growth from the inventory swing in manufacturing is also winding down, as expected. Manufacturers had reduced production below demand during the recession, drawing down inventories rapidly. Over the past year of recovery, they have lifted production back to demand levels, and even a bit higher, to modestly rebuild their depleted stocks. This process is now about over, and the growth in industrial production is set to moderate.

Unexpected was the European sovereign debt crisis that erupted in the spring. The U.S. recovery seemed on track to evolve into a self-sustaining expansion, with businesses investing and hiring more aggressively. Some 400,000 private sector jobs were created in March and April. But the anxiety created by Europe's problems undermined stock prices and confidence (see Chart 3). The Standard & Poor's 500 stock index fell nearly 15% during May and June. Businesses seem to have put hiring plans on hold since then, while wealthier households, highly attuned to the value of their stock portfolios, have turned more cautious in their spending.

Chart 3: European Debt Crisis Hammers Confidence



Sources: Bloomberg, S&P, Moody's Analytics

As a result, the recovery is struggling, and the odds of a double-dip recession during the coming year have risen to an uncomfortably high one in three. The reason the odds are not still higher is that large and midsize businesses are very profitable—economy-wide corporate profits are back to where they were prior to the recession—and have solid balance sheets and are thus unlikely to cut investment and payrolls. But the situation is fragile; nothing else must go wrong. Another round of financial turmoil in Europe, for example, or a modest policy error here at home could unhinge the collective psyche.

This testimony will argue that the policy response to the economic crisis successfully headed off an even worse calamity. It expands on several aspects of the quantitative analysis of the policy response in Blinder-Zandi and considers some criticisms of that study.[ii] Further evidence of the policy response's effectiveness is found by examining the timing of various policy steps and the subsequent performance of the financial system and economy. This analysis has important implications for current monetary and fiscal policy, namely that policymakers should remain aggressive in supporting the economy until it is experiencing consistent growth at a pace near its long-term potential level. This means that, at the very least, policymakers should *not* end their support too quickly, and should provide additional help if the recovery falters further in coming months. Of course, given the nation's increasingly daunting fiscal outlook, any additional aid should be provided judiciously and not significantly add to long-term budget deficits.

Assessing the policy response

The policy response to the economic crisis by the Federal Reserve, the Bush and Obama administrations and Congress was the most aggressive and multi-faceted ever recorded, and was ultimately very successful.[iii]

During the worst of the crisis, policymakers committed an estimated $12 trillion in government funds (see Table 1). This money funded a plethora of efforts ranging from the Fed's credit facilities to the Troubled Asset Relief Program (TARP) to the various fiscal stimulus measures. Even now, some $3.4 trillion is still available if needed.

Broadly speaking, the government set out to accomplish two goals: stabilize the reeling financial system and to mitigate the burgeoning recession, ultimately restarting economic growth. The first task was made necessary by the financial crisis, which struck in the summer of 2007 and spiraled into a panic in the fall of 2008. After the failure of Fannie Mae and Freddie Mac and the Lehman Brothers bankruptcy in early September, liquidity evaporated, credit spreads ballooned, stock prices fell sharply, and a string of major financial institutions failed. The second task was made necessary by the devastating effects of the financial crisis on the real economy, which began to contract at an alarming rate in the wake of the Lehman failure.

To gauge how well the policies achieved their goals, the Moody's Analytics model of the U.S. economy was simulated under several different policy assumptions. Details of these simulations and the results are provided in Blinder-Zandi. The bottom line is that policy efforts stabilized the financial system and averted an economic depression. The response was not able to forestall the Great Recession, which ended more than a year ago, but without extraordinary government action the economy would still be contracting, not hitting bottom until 2011.[iv] Real GDP would have fallen a stunning 12% peak to trough, compared with an actual decline of 4%, and 16.6 million jobs would have been lost, about twice as many as were in actuality. The unemployment rate would have surged to 16.5%, resulting in outright deflation in prices and wages. This dark scenario surely constitutes a 1930's-like depression.

The policy response was very expensive, but the cost of not responding would have been significantly greater. Total direct costs, including the TARP, the fiscal stimulus and other efforts such as addressing mortgage-related losses at Fannie Mae and Freddie Mac, are expected to reach almost $1.6 trillion (see Table 1). Adding approximately $750 billion in lost revenue and increased government spending from the weaker economy, the total budgetary cost of the crisis is projected to approach $2.4 trillion, about 16% of GDP.[v] But consider the alternative: if policymakers had not responded to the crisis and the economy had descended into a depression, the budgetary costs would have been at least *twice* as large according to the simulation results. Policymakers had no choice but to respond aggressively.

Table 1: Federal Government Response to the Financial Crisis

$ bil

	Originally Committed	Currently Provided	Ultimate Cost
Total	11,990	3,430	1,577
Federal Reserve			
Term auction credit	900	0	0
Other loans	Unlimited	53	3
Primary credit	Unlimited	0	0
Secondary credit	Unlimited	0	0
Seasonal credit	Unlimited	0	0
Primary Dealer Credit Facility (expired 2/1/2010)	Unlimited	0	0
Asset-Backed Commercial Paper Money Market Mutual Fund	Unlimited	0	0
AIG	26	20	2
AIG (for SPVs)	9	0	0
AIG (for ALICO, AIA)	26	0	1
Rescue of Bear Stearns (Maiden Lane)**	27	29	4
AIG-RMBS purchase program (Maiden Lane II)**	23	16	1
AIG-CDO purchase program (Maiden Lane III)**	30	23	4
Term Securities Lending Facility (expired 2/1/2010)	200	0	0
Commercial Paper Funding Facility** (expired 2/1/2010)	1,800	0	0
TALF	1,000	33	0
Money Market Investor Funding Facility (expired 10/30/2009)	540	0	0
Currency swap lines (expired 2/1/2010)	Unlimited	0	0
Purchase of GSE debt and MBS (3/31/2010)	1,425	1,259	0
Guarantee of Citigroup assets (terminated 12/23/2009)	286	0	0
Guarantee of Bank of America assets (terminated)	108	0	0
Purchase of long-term Treasuries	300	317	0
Treasury			
TARP *(see detail in Table 9)*	600	254	89
Fed supplementary financing account	560	200	0
Fannie Mae and Freddie Mac	Unlimited	145	278
FDIC			
Guarantee of U.S. banks' debt*	1,400	293	4
Guarantee of Citigroup debt	10		0
Guarantee of Bank of America debt	3		0
Transaction deposit accounts	500	0	0
Public-Private Investment Fund Guarantee	1,000	0	0
Bank Resolutions	Unlimited	23	71
Federal Housing Administration			
Refinancing of mortgages, Hope for Homeowners	100	0	0
Expanded mortgage lending	Unlimited	150	26
Congress			
Economic Stimulus Act of 2008	170	170	170
American Recovery and Reinvestment Act of 2009***	808	391	784
Cash for Clunkers	3	3	3
Additional Emergency UI benefits	90	39	90
Education Jobs and Medicaid Assistance Act	26	0	26
Other stimulus	21	12	21

Notes:
*Includes foreign-denominated debt
**Net portfolio holdings
*** Excludes AMT patch

Sources: Federal Reserve Board, Treasury, FDIC, Fannie Mae, Freddie Mac, Recovery.gov, Moody's Analytics

Several criticisms have been offered of the Blinder-Zandi analysis. The most significant revolve around the structure of the Moody's Analytics model, with critics arguing it cannot accurately capture the economic impact of the policies being considered.[vi] It is important to point out that the Moody's model has been used for forecasting, scenario analysis and quantifying the impact of policies on the economy for nearly 20 years. A large number of nonfinancial corporations, financial institutions, regulators, and government bodies use the model regularly for these purposes. The Congressional Budget Office and the Council of Economic Advisers also derive their impact estimates for policies such as the fiscal stimulus using similar models and approaches. The Moody's model is in the mainstream of econometric models currently being used to address practical business and policy problems.[vii]

The Moody's model is also continually evolving to adapt to a shifting economic and policy environment. For example, the model was enhanced for the purposes of the Blinder-Zandi study to adequately capture the impact of a vast array of financial policies, most of which were unprecedented and unconventional. The basic approach was to treat these policies as ways to reduce credit spreads, particularly the three spreads that play key roles in the model: The spread between three-month Libor and three-month Treasury bill (the TED spread); the spread between fixed mortgage rates and 10-year Treasury bonds; and the spread between below-investment grade corporate bonds and Treasury bonds. All three of these spreads rose alarmingly during the crisis, but fell sharply again once the financial medicine was applied. The key question is how much of the decline in spreads to attribute to the policies.

The TED spread equation is illustrative of how Blinder-Zandi addressed this question. The spread is modeled using two-stage least squares techniques as a function of the delinquency rate on commercial bank loans and leases, the market value of equity lost in failing financial institutions during the financial crisis, the S&P 500 VIX index, and the amount of capital raised by the banking system via the Capital Purchase Program in TARP and the bank stress tests (see Table 2). The rationales are straightforward: As the delinquency rate increases, banks demand higher interest to lend to other banks. The equity lost in failing institutions captures the growing panic that investors felt as the crisis intensified. The VIX is included to capture the impact of broad financial market volatility on credit spreads, and initial UI claims are used as an instrument for the VIX to account for any issue with endogeneity. The capital raised by banks either from the federal government or in the equity market captures the benefit of the financial policy response in restoring stability to short-term funding markets. Based on this equation, the capital required by the policy response reduced the TED spread by some 200 basis points.[viii]

Table 2: TED Spread Model: Difference Between 3-month LIBOR and 3-month Treasury Bill

Method: Two-Stage Least Squares
Included observations: 51

Instrument specification: delinquency rate, commercial bank loans and leases, market value of equity lost in failing financial institutions, cumulative capital raised due to policy actions, initial claims of unemployment insurance, TED spread lagged 1 month

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Delinquency rate, commercial bank loans and leases	0.231	0.070	3.284	0.002
Market value of equity lost in failing financial institutions	0.000	0.000	-3.879	0.000
Cumulative capital raised due to policy actions	-0.004	0.001	-5.744	0.000
VIX index	0.038	0.014	2.726	0.009
Ted Spread(-1)	0.152	0.182	0.837	0.407
R-squared	0.86			
Adjusted R-squared	0.85			
S.E. of regression	0.33			
Durbin-Watson stat	1.77			
Instrument rank	5			
Mean dependent var	1.01			
S.D. dependent var	0.84			
Sum squared resid	4.90			
J-statistic	0.00			

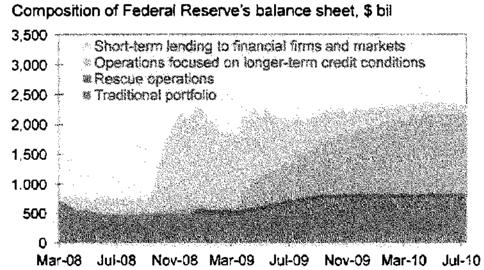
Another recent model innovation, which should be identified given some of the criticism, is that monetary policy is endogenously determined in the model and does allow for credit or quantitative easing. The federal funds rate equation is based on a FOMC reaction function in which the real funds rate target is a function of the economy's estimated real growth potential, the difference between the actual and target inflation rate (assumed to be 2% for core consumer price inflation), and the difference between the actual unemployment rate and the natural rate (currently estimated to be 5.5%).[ix] This specification is augmented to include the difference between the presumed 2% inflation target and inflation expectations, as measured by 5-year, 5-year-forward Treasury yields.

Because of the Federal Reserve's extensive use of quantitative easing to respond to the financial crisis, the value of assets on the Federal Reserve's balance sheet were added to the model. Fed assets are specified as a function of the federal funds rate target. When the funds rate implied by the equation falls below zero, the Fed's balance sheet expands. And the more negative the implied funds rate, the greater the assumed balance sheet expansion. Specifically, for every 100 basis points that the desired (but unachievable) funds rate becomes negative, the Fed is presumed to expand its balance sheet by $1.2 trillion. At present, the implied funds rate is negative 2.5%, which suggests that the Fed should be holding close to $4 trillion in assets—compared to the Fed's actual current holdings of $2.5 (see Chart 4). Fed assets and the funds rate are in turn key determinants of 10-year Treasury yields in the model.

Another common criticism is that models such as Moodys' do not account for the important role expectations play in determining the economic impact of fiscal policy. In fact, the outlook for the federal debt-to-GDP ratio is a key variable in the model impacting monetary policy and long-term interest rates via inflation expectations and real yields, and by extension current spending, saving and investment decisions. It is perhaps telling that current inflation expectations and real long-term Treasury yields remain low despite the current large budget deficits, ostensibly reflecting in part expectations that policymakers will meaningfully address the nation's fiscal problems.

Chart 4: The Fed Expands Its Balance Sheet

Composition of Federal Reserve's balance sheet, $ bil



Sources: Federal Reserve Board, Moody's Analytics

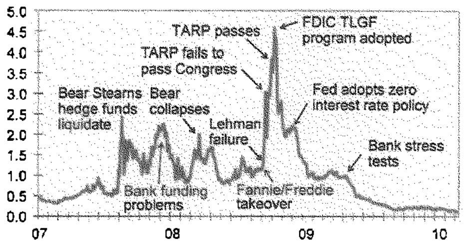
More empirical evidence

The success of the policy response to the economic crisis is also suggested by the timing of various aspects of the response and the subsequent performance of the financial system and economy.[x]

The restoration of stability in the financial system in late 2008 and early 2009 coincides closely with several important policy steps. Most important was the passage of the Emergency Economic Stabilization Act—the $700 billion TARP legislation—on October 3, 2008. The financial system had been thrown into panic by the government takeover of Fannie Mae and Freddie Mac and failure of Lehman Brothers in early September.[xi] The TED spread ballooned from its already elevated level near 100 basis points to 300 basis points when Congress made its first attempt to pass TARP on September 29 (see Chart 5). That first attempt at passage failed, and financial markets were thrown into further turmoil, with the spread widening to a record 400 basis points. After Congress reversed itself and passed TARP a few days later, the financial panic quickly passed its apex.

Chart 5: Policy Actions Quell the Financial Panic

Difference between 3-mo Libor and Treasury bill yields



Sources: Federal Reserve Board, Moody's Analytics

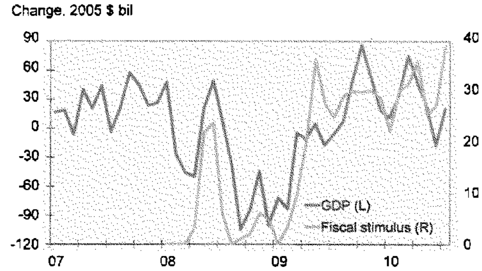
The FDIC's Temporary Liquidity Guarantee Program (TLFG), begun on October 13, 2008, was also vital in ending the run on the financial system. The TED spread hit an all-time high of 458 basis points the day the program began. The TLGF, which federally guaranteed any debt issued by qualifying financial institutions, immediately assuaged investor concern and allowed the nation's critical banks to regain access to the capital markets and raise funds at a reasonable cost. Liquidity in the financial system immediately revived and the panic subsided.

The numerous unprecedented and creative actions taken by the Federal Reserve were also instrumental in restoring stability to the financial system. None were more important than the Fed's adoption of a zero interest rate policy on December 16, 2008. The TED spread which was hovering at 200 basis points prior to the move, quickly fell closer to 100 basis points. The aggressive implementation of credit easing in March 2009, which expanded the Federal Reserve's balance sheet through purchases of Treasury securities, Fannie Mae and Freddie Mac and other GSE debt, and mortgage securities backed by Fannie and Freddie, caused credit spreads, particularly mortgage spreads, to compress even further.

The financial panic reached its denouement with the bank stress tests in spring 2009. The Federal Reserve and Treasury required the nation's 19 largest bank holding companies to assess their capital adequacy under depression-like economic assumptions. The results of the tests, dubbed the Supervisory Capital Assessment Program (SCAP), were released publicly on May 7, 2009. A number of the banks were then required to take more capital from the TARP, while others raised additional equity in the public market. The tests were credible and the extra capital restored confidence, particularly within the banking system. Banks were no longer nervous about lending to each other and the TED spread narrowed further. By summer 2009, the TED spread had come full circle, settling near the 20 basis points that had prevailed prior to early 2007.

The end of the Great Recession last summer also coincided with the maximum boost to economic growth from the federal fiscal stimulus. The stimulus was designed to short-circuit the recession and jump-start recovery, and judging by the historical record, it did precisely that. Temporary tax cuts and spending increases included as part of the Recovery Act, which passed in February 2009, began to enter the economy in earnest by April and May 2009. Real GDP, which was in free fall in the first quarter of 2009, shrank only modestly in the second quarter and resumed growing in the third (see Chart 6).[xii] The recession was over.

Chart 6: A Close Link Between Stimulus and Real GDP

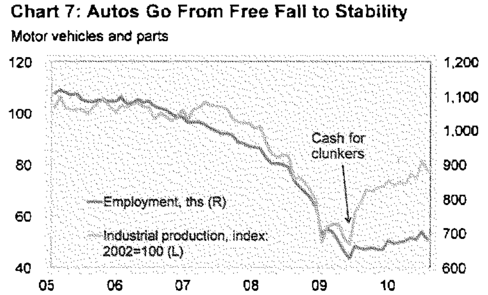


Sources: Macroeconomic Advisors, Moody's Analytics

The impact of a federal stimulus was also evident during the summer of 2008, when the Bush administration proposed and Congress enacted tax rebates to lower and middle income households and temporary tax cuts for businesses. Households received the bulk of the rebate money in May and June. GDP, which had contracted in the first quarter of 2008, rose in the second quarter.[xiii] Indeed, the economy might have been able to avoid recession altogether if not for the financial panic that began that September as the boost from the rebate checks was fading.

Fiscal stimulus measures also averted a crash in the auto industry. The cash for clunkers program, which encouraged households to trade in their gas-guzzling vehicles for more efficient new ones, marked a dramatic turnaround for the beleaguered motor vehicle market. After falling by almost 50% during the Great Recession, vehicle production hit bottom in August 2009, the month cash for clunkers was in full swing (see Chart 7).[xiv] Employment in the auto industry quickly stabilized and has since been expanding, providing a key source of private sector job growth. Vehicle sales would have ultimately stabilized without cash for clunkers, but likely not before production and jobs had fallen further.

Chart 7: Autos Go From Free Fall to Stability

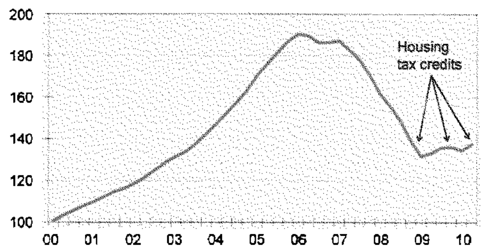


Sources: Federal Reserve Board, BLS

The dizzying collapse of the housing industry was also mitigated in significant part by tax credits implemented as part of the fiscal stimulus,[xv] which induced homebuyers to purchase sooner rather than later. It worked: Home sales surged prior to the expiration of the credits, particularly in November 2009 and April 2010. The credits have been criticized for merely pulling sales forward; indeed sales weakened measurably after each round of credits expired. But the credits' principal objective was to break the deflationary psychology afflicting the housing market. As potential buyers remained on the sidelines for fear that prices would fall further, such fear became self-realizing. While further modest house price declines are likely in coming months, this pernicious deflationary spiral appears to have been broken (see Chart 8).

Chart 8: Tax Credits Break the Deflationary Psychology

Case-Shiller® home price index: 2000Q1=100



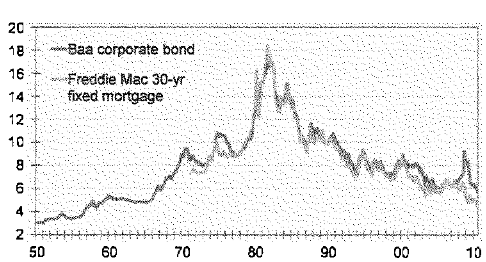
Sources: Fiserv, Moody's Analytics

Current policy

The debate over the response to the economic crisis is important for many reasons, but mainly for how it guides policy going forward. This is especially vital because the recovery has yet to evolve into a self-sustaining economic expansion. Arguing that the policy response did not work or was counterproductive could imply that policymakers should step aside and let events run their course. This would be a significant error. At the very least, policymakers should not end support for the economy until a self-sustaining expansion has taken hold, and should step up support if the recovery continues to flag.

From the Federal Reserve, more quantitative easing may be needed soon. This is increasingly evident in the high and rising unemployment rate, undesirably low inflation and weakening inflation expectations. Quantitative easing would mean further Fed purchases of Treasury securities to lower fixed mortgage rates and borrowing costs, support stock prices and ultimately persuade lenders to ease underwriting standards. The possibility of additional quantitative easing was discussed at the FOMC's August meeting; since then, stock prices have firmed and borrowing costs have declined. The Freddie Mac conforming loan rate has fallen to a record low 4.3%, and the yield on Baa corporate bonds, the lowest investment-grade securities, has cracked a 50-year low of nearly 5.5% (see Chart 9).

Chart 9: Long-Term Rates Approach 50-Year Lows



Sources: Moody's Investors Service, Freddie Mac

There are significant questions regarding the effectiveness of quantitative easing as an economic stimulus. It is unclear how much lower the Fed can push long-term rates, or whether it can induce creditors to ease standards to restart the housing market and business expansion. The slide in home sales following the last homebuyers' tax credit has been extraordinarily severe, particularly given low mortgage rates. Prospective buyers may be waiting to see if Congress produces yet another tax incentive like the three earlier temporary credits. More ominously, the weak job market and hobbled consumer sentiment could simply be too much for even lower mortgage rates to overcome soon.

Lower borrowing costs have supported business investment in equipment and software but have not yet persuaded firms to step up hiring. Businesses remain extraordinarily cautious, probably because of still-raw memories of the recession and policy uncertainty. Managers have watched Congress debate healthcare, financial regulation, energy policy, immigration and most recently, what to do about the expiring tax cuts. Though healthcare and financial regulatory reform are now law, the new rules remain unclear. Businesses will not take the plunge and expand payrolls until they have a clearer understanding of what the changes mean for them.

Expiring tax cuts

Fiscal policymakers should thus quickly reach a decision regarding the expiring tax cuts. Most were passed under the Bush administration and will lapse at the end of 2010 if Congress does not act. The most important provisions concern individual income tax rates, but capital gains and dividend taxes are also affected, along with personal exemptions, the marriage penalty, the alternative minimum tax, the Making Work Pay program, the earned income tax credit, the child tax credit, and estate and gift taxes. In all, these tax cuts are worth about $300 billion per year, or about 2% of GDP, according to the Congressional Budget Office (see Table 3). Uncertainty about what tax rates will be just a few months from now is adding to the collective nervousness.

Table 3: Cost of Extending Various Expiring Tax Provisions

$ bil, fiscal years

	2011	2012	2011-2020
Bush Era Tax Cuts:			
Income tax provisions of Bush tax cuts	-79	-150	-1615
Estate and gift taxes	-16	-44	-571
Reduced tax rates on capital gains and dividends	-15	-17	-348
Total Bush Era Tax Cuts	-110	-210	-2534
Other Major Tax Provisions:			
Making Work Pay tax credit	-30	-59	-571
Increased AMT exemption amount	-69	-31	-530
Total Tax Cuts	-209	-299	-3636

Source: Congressional Budget Office

There is wide agreement that allowing all the tax cuts to expire January 1 makes little sense given the economy's fragility. Based on a simulation of the Moody's Analytics macroeconomic model, an across-the-board tax increase would precipitate a double-dip recession during the first half of 2011; the hit to after-tax income would undermine fragile consumer confidence and spending (see Table 4).[xvi] Employment would decline throughout much of 2011, bottoming out some 8.6 million jobs below its late 2007 peak. Unemployment would remain near double digits into late 2012. Under this scenario, the economy does not return to full employment until 2015, eight years after the Great Recession began.

There are longer-term economic benefits to allowing the tax cuts to expire. Budget deficits would be measurably smaller in the latter half of the decade, resulting in lower long-term interest rates and a generally stable federal debt-to-GDP ratio. The benefits also accumulate over time and become even more pronounced in the subsequent decade. This clearly highlights the necessity of addressing the nation's longer-term fiscal problems once the economy is back on sounder ground.

Table 4: Economic Impact of Various Tax Cut Scenarios

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Real GDP, annualized % change											
Tax cuts expire	2.68	0.90	3.78	5.94	4.29	2.68	2.33	2.39	2.32	2.25	2.23
Republican proposal	2.69	2.95	5.23	4.52	2.77	2.07	2.12	2.17	2.11	2.04	2.04
Administration proposal	2.68	2.58	4.79	4.77	2.94	2.31	2.23	2.25	2.17	2.12	2.12
Compromise proposal	2.69	2.95	5.00	4.31	2.89	2.30	2.22	2.24	2.17	2.12	2.12
Real GDP, 2005$ bil											
Tax cuts expire	13,226	13,345	13,850	14,673	15,302	15,712	16,079	16,464	16,846	17,224	17,609
Republican proposal	13,226	13,617	14,328	14,976	15,391	15,710	16,042	16,391	16,736	17,077	17,425
Administration proposal	13,226	13,567	14,217	14,895	15,334	15,687	16,037	16,399	16,757	17,114	17,479
Compromise proposal	13,226	13,616	14,298	14,914	15,345	15,698	16,047	16,406	16,762	17,118	17,481
Employment, mil											
Tax cuts expire	130.21	129.70	130.67	136.29	141.56	144.15	145.47	146.56	147.57	148.54	149.50
Republican proposal	130.22	131.52	135.03	139.94	143.29	144.98	145.98	146.84	147.65	148.40	149.18
Administration proposal	130.21	131.20	134.11	138.95	142.46	144.37	145.57	146.53	147.45	148.36	149.30
Compromise proposal	130.22	131.52	134.83	139.27	142.57	144.46	145.64	146.59	147.49	148.38	149.31
Unemployment rate, %											
Tax cuts expire	9.72	10.65	10.22	7.86	6.08	5.70	5.73	5.69	5.63	5.60	5.57
Republican proposal	9.71	9.86	8.25	6.16	5.24	5.29	5.44	5.55	5.61	5.69	5.75
Administration proposal	9.71	10.00	8.65	6.59	5.60	5.55	5.61	5.65	5.66	5.65	5.64
Compromise proposal	9.71	9.87	8.33	6.46	5.56	5.52	5.59	5.64	5.65	5.65	5.64
Federal budget deficit, fiscal year, $ bil											
Tax cuts expire	(1,277)	(732)	(1,055)	(770)	(489)	(485)	(503)	(506)	(513)	(544)	(561)
Republican proposal	(1,277)	(943)	(743)	(581)	(667)	(716)	(773)	(846)	(892)	(950)	(1,014)
Administration proposal	(1,277)	(904)	(795)	(664)	(685)	(709)	(716)	(749)	(789)	(845)	(905)
Compromise proposal	(1,277)	(943)	(782)	(630)	(677)	(703)	(715)	(749)	(792)	(850)	(914)
Federal debt-to GDP ratio, %											
Tax cuts expire	60.6	69.0	74.5	77.1	77.9	78.7	79.2	79.4	79.2	78.9	78.5
Republican proposal	60.6	68.5	72.4	74.1	76.1	78.2	80.1	81.7	83.2	84.6	85.9
Administration proposal	60.6	68.6	72.9	74.9	77.0	79.0	80.6	81.8	82.8	83.7	84.5
Compromise proposal	60.6	68.5	72.7	74.8	76.9	78.8	80.4	81.6	82.7	83.6	84.5

Sources: BEA, BLS, Treasury, Moody's Analytics

While there is consensus against an across-the-board tax increase soon, this is where the consensus ends. The president supports permanently extending the current tax rates for all except the highest income households, while congressional Republicans want the entire basket of cuts made permanent. More specifically, the president wants those with a joint adjusted gross income above $250,000 annually to pay at rates that were in effect during the 1990s. For those in the top income bracket, the marginal personal income rate would rise from its current 35% to 39.6%. The capital gains tax rate for this group would rise from 15% to 20%.

A prudent middle course between the president's plan and the Republican counterproposal would be to forestall any tax hikes in 2011 but slowly phase in higher rates on upper income households beginning in 2012. By then the economy will presumably be on firmer ground, with stock and house prices consistently rising. Allowing the tax cuts for high-income households to expire over, say, a three-year period would not harm the economy. Fears of diminished living standards among high-income households will have faded, and the increases would be small enough to not materially alter their decisions about spending, working or investing. Remember that these households paid the same higher tax rates during the 1990s, a time when the U.S. economy performed admirably. Affluent households will benefit as much as anyone from a reduced federal deficit, which will keep interest rates lower, spurring more investment, jobs and wealth creation. Simulating the Moody's Analytics model under this proposal results in a more durable near-term recovery than under using the president's plan, and a much smaller federal debt load in the long run than under the Republican plan (see Table 4).

None of this means the tax code should be off limits when deciding how to fix the long-term fiscal problems. Everything must be on the table for the fiscal commission now working toward a solution. Experience with fiscal austerity at home and overseas strongly suggests it is best for the economy in the long run to restrain government spending rather than raise taxes, but that tradeoff must also be part of the national debate.

Other fiscal policy

If the recovery fails to gain traction soon and unemployment rises back into the double digits, policymakers should consider an expanded job tax credit.[xvii] A tax break for businesses that add to payrolls is in place now, but it is small and restrictive and due to expire at year's end; consequently it has had little impact.[xviii] Washington could offer a $7,500 tax credit for each additional net hire made in the 12 months beginning this October. Allot $50 billion for the credit and make it first come, first serve, so that businesses have an incentive to hire quickly. Under reasonable assumptions, a $50 billion program would be sufficient to generate almost a million additional jobs on net.

So that it doesn't add significantly to the nation's debt load, businesses that take advantage of the credit should be required to increase future tax liabilities by the same $7,500 per net hire over, say, a five-year period beginning in 2012. Firms would in effect receive an interest-free loan from the Treasury to hire now. To ensure that big companies don't monopolize the tax break, limit the credit to firms that employ fewer than 500 employees. This would go a long way toward addressing the problems small businesses currently have obtaining loans to expand payrolls. It would also encourage mid-sized companies that do have cash to deploy it quickly by hiring. Some of these job tax credits will go to businesses that would have hired anyway, but that only means we are rewarding stronger firms, making it more likely they will hire additional workers in the future.

To address what will likely be persistently high unemployment, a policy focus should be put on significantly upgrading and expanding the nation's infrastructure. Big infrastructure projects take years to complete, but we face years of high unemployment. These projects require lots of workers over long periods, and could employ many of the construction workers who lost jobs in the housing bust. Jobs would be created in many communities across the country, all the more important now given that millions of homeowners are underwater and can't easily move to find work. They are literally stuck; infrastructure development will take the jobs to them. It is also important to remind ourselves that we have underinvested in infrastructure for decades, as is evident from our crumbling bridges and inefficient air and seaports; new investments are thus likely to bring a high economic return.

Instead of government operating the projects, let private investors do them with government backing. Pension funds, insurance companies, sovereign wealth funds and private equity firms are eager to invest in such projects—not just because they can bring high returns, but even more importantly because they can provide steady, long-running revenue streams that match well with long-term fund obligations. But these investors need government help to navigate the myriad roadblocks to development—zoning, rights-of-way, environmental requirements—and to provide a financial backstop in case things go wrong. Getting private investors involved also helps address reasonable concerns about politically driven decisions leading to bad investment outcomes.

To this end, the federal government can help by providing guarantees to back private financing of infrastructure projects. Washington wouldn't issue bonds or make loans to fund projects, but would partially insure investors in case a project fell significantly short of revenue projections. The guarantees would lower borrowing costs and make many more projects financially viable. Such insurance could be paid for by tolls or user fees assessed on the use of the infrastructure.

Both of these ideas—the expanded job tax credit and catastrophic infrastructure investment insurance—are feasible. Neither is outside the policy box. The President proposed a similar tax credit for hiring earlier this year, but it was pushed aside in favor of the current, much smaller credit. Build America Bonds, which open financing of infrastructure projects to more types of investors, have been a big success since they were implemented as part of last year's fiscal stimulus program. And while these ideas could fall completely flat, if they do they won't cost taxpayers a thing.

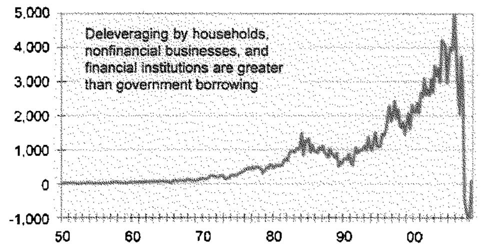
Deficit concerns

Fiscal policymakers are rightfully worried about an additional stimulus, given the nation's large budget deficits and daunting fiscal outlook. The federal budget deficit ballooned to $1.4 trillion in fiscal 2009, equal to a record 10% of GDP, and this year's deficit will be similar. Even President Obama's budget, presented earlier this year, does not result in a fiscally sustainable deficit at any point during its 10-year outlook.[xix]

The very poor fiscal situation reflects the ultimate expected price tag of the financial crisis and recession. And even after the costs associated with the financial crisis are mostly paid, without significant changes to tax and government spending policy the budget outlook is bleak. This is largely due to the rising expected cost of entitlement programs, despite the passage of healthcare reform. The nation's federal debt-to-GDP ratio is projected to increase to almost 85% a decade from now, double the approximately 40% that prevailed prior to the current financial crisis, and the highest ratio since World War II (see Chart 10).

Chart 10: No Credit Growth

Total domestic credit growth, $ bil



Sources: Federal Reserve Board, Moody's Analytics

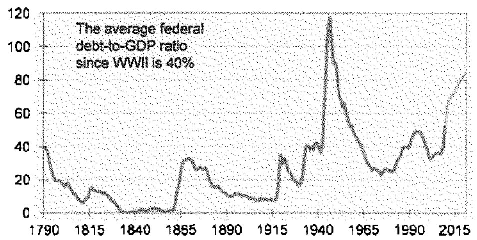
The need to make fundamental changes to government spending and tax policy is thus much more intense in the wake of the financial crisis and recession. Unless policymakers credibly address these issues soon, a future fiscal crisis will likely result in higher interest rates, lower stock prices, a weaker U.S. dollar, and ultimately lower living standards.

As such, it would be desirable for fiscal policymakers to pay for any additional policy support with spending offsets and tax increases. Doing so this year or next would dilute or neutralize any economic benefit from the stimulus, but it should be placed high on the legislative agenda as soon as the economy is in full swing, most likely beginning in 2012. Making such a commitment now would send a strong signal to global investors that policymakers are serious about addressing the nation's fiscal problems. This would make it easier for policymakers to run a larger deficit in the coming year to fund the stimulus without causing long-term interest rates to rise and crowding out private investment.

That said, fully paying for any additional stimulus should not be a necessary condition for providing it. Policymakers have some latitude to run a larger near-term deficit, given the ongoing global flight to quality into U.S. government debt and, more importantly, given deleveraging by the private sector. Households, businesses and financial institutions are reducing their debt outstanding so rapidly that total credit demand remains moribund despite enormous borrowing by federal, state and municipal governments (see Chart 11). With private credit demand still falling, there is little prospect that providing more modest deficit-financed stimulus through mid next year will result in higher interest rates.

Chart 11: Policymakers Must Change This Outlook

Federal debt-to-GDP ratio



Sources: Treasury, Moody's Analytics

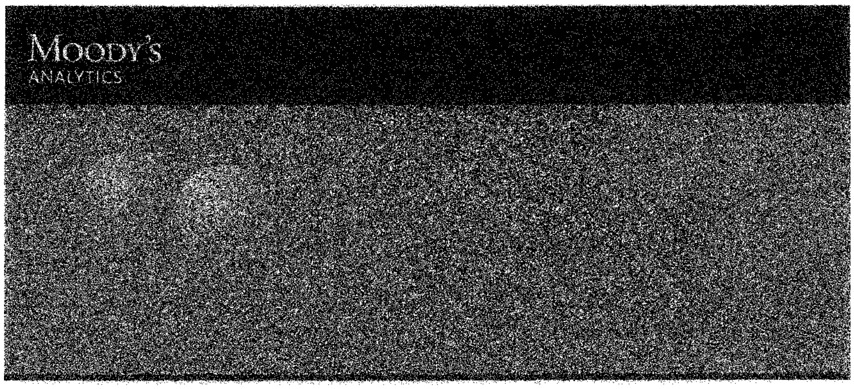
Conclusions

The economy has come a long way since the end of the Great Recession. The financial system is stable, real GDP and employment are expanding, stock prices are up and house prices have largely stabilized. That the recovery is more than a year old testifies to the success of the monetary and fiscal policy response. If policymakers had not acted as aggressively, the economy would likely still be mired in depression and the costs to taxpayers would have been much greater.

Despite this, it is understandable that the economy's continued fragility has fueled criticism of the government's response. No one can know for sure what the world have looked like today if policymakers had not acted as they did; the estimates presented here are just that, estimates. It is also not difficult to find fault with isolated aspects of the policy response. Were the bank and auto industry bailouts really necessary? Do extra UI benefits encourage the unemployed not to seek work? Shouldn't bloated state and local governments be forced to cut wasteful budgets? Was the housing tax credit a giveaway to buyers who would have bought homes anyway? Are the foreclosure mitigation efforts the best that could have been done? The questions go on and on.

Moreover, there is no free lunch. The government response was costly, and effectively pulled the nation's fiscal problems forward by a full decade. Policymakers have little choice but to deal with the nation's byzantine tax structure and ballooning entitlement programs soon. Many policymakers are understandably reticent to provide even more stimulus, lest they make these budgetary problems even more severe.

Indeed, even if policymakers do nothing else, the recovery will still likely continue. The next six to 12 months will be uncomfortable as the economy struggles to gain traction, but a full-fledged expansion should take hold by this time next year. Policymakers would be taking a significant gamble, however. Given the halting recovery and the clear threats remaining, it is not difficult to construct scenarios in which the economy backtracks into recession. Once back in recession, moreover, it is unclear how the economy would get out. The slump could last a long time and cost millions more their livelihoods. The nation's fiscal problems would then be completely intractable. Prudent economic risk management—backed by the lessons of recent history—argues forcefully for policymakers to err on the side of providing too much near-term economic support rather than too little.



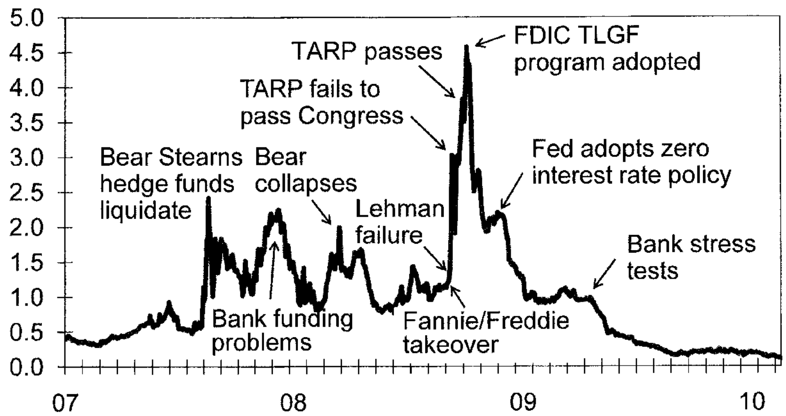
Assessing the Policy Response to the Economic Crisis

MARK ZANDI, CHIEF ECONOMIST

FROM MOODY'S ECONOMY.COM

Policy Actions Quell the Financial Panic

Difference between 3-month Libor and Treasury bill yields



Sources: Federal Reserve Board, Moody's Analytics

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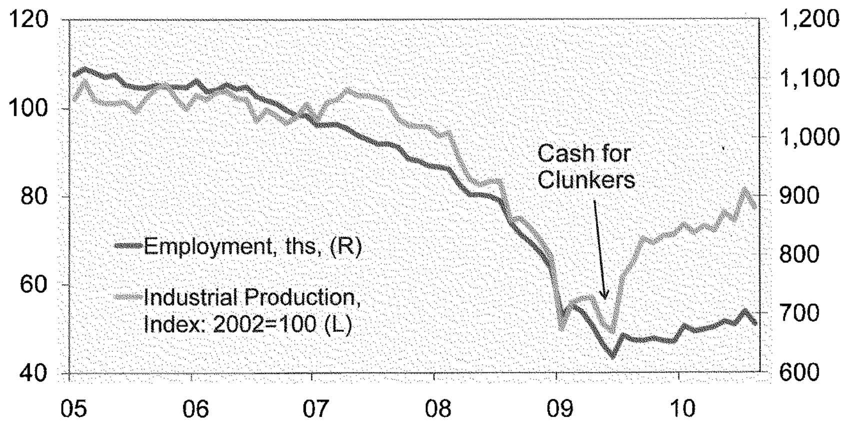
Cash For Clunkers Jump Starts the Auto Industry

Motor Vehicles and Parts



Sources: Federal Reserve Board, BLS

MOODY'S ANALYTICS

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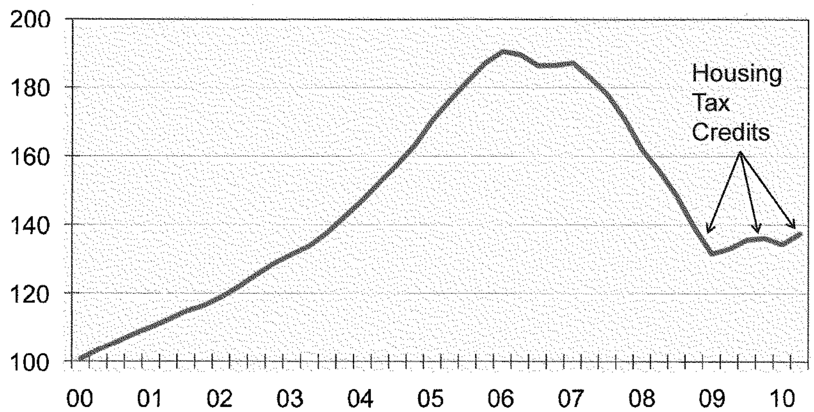
Housing Credits Break the Deflationary Psychology

Case Shiller® Home Price Index: 2000Q1 = 100



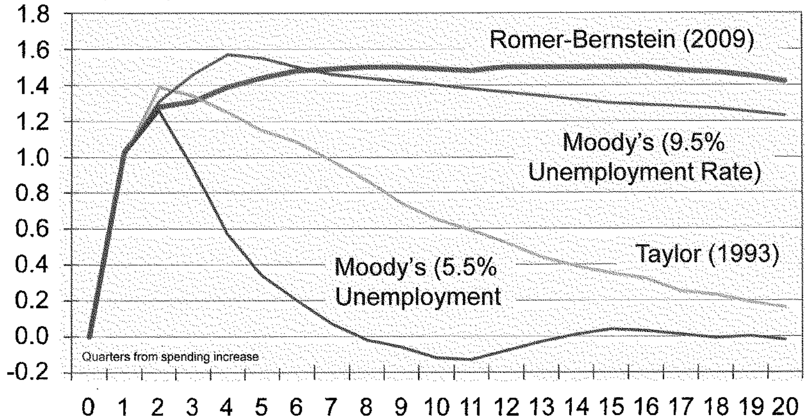
Sources: Fiserv, Moody's Analytics

MOODY'S ANALYTICS

FROM MOODY'S ECONOMY.COM

Government Spending Multipliers

Estimated impact on GDP of a permanent increase in government spending of 1 percent of GDP



Sources: Romer-Bernstein, Cogan et al, Moody's Analytics

Moody's Analytics

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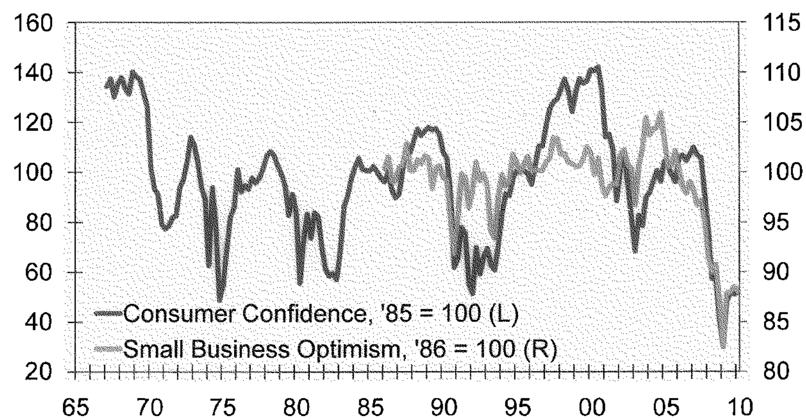
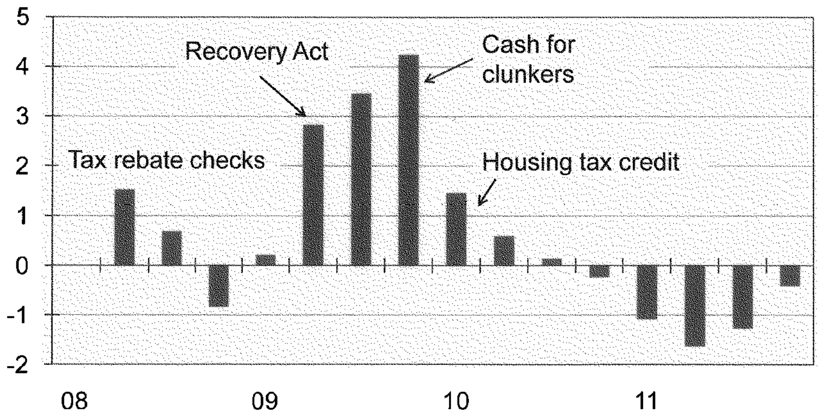
A Dark Mood



Sources: Conference Board, NFIB, Moody's Analytics

The Economic Boost From Fiscal Stimulus Fades

Contribution to real GDP growth, %



Source: Moody's Analytics

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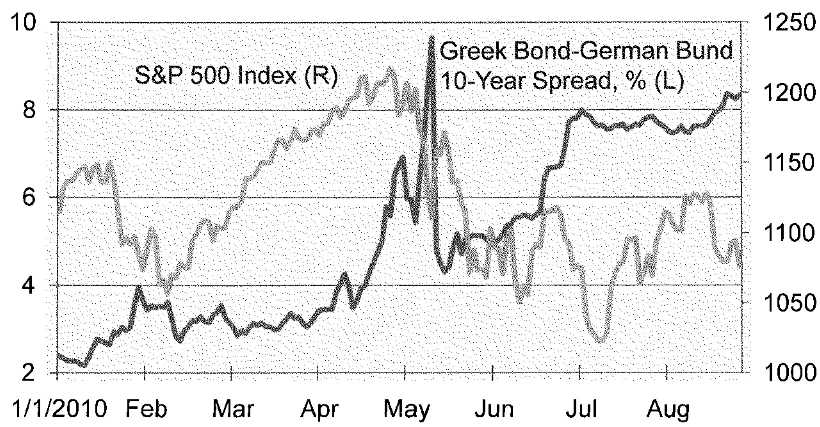
European Debt Crisis Hammers Confidence



Sources: Bloomberg, S&P, Moody's Analytics

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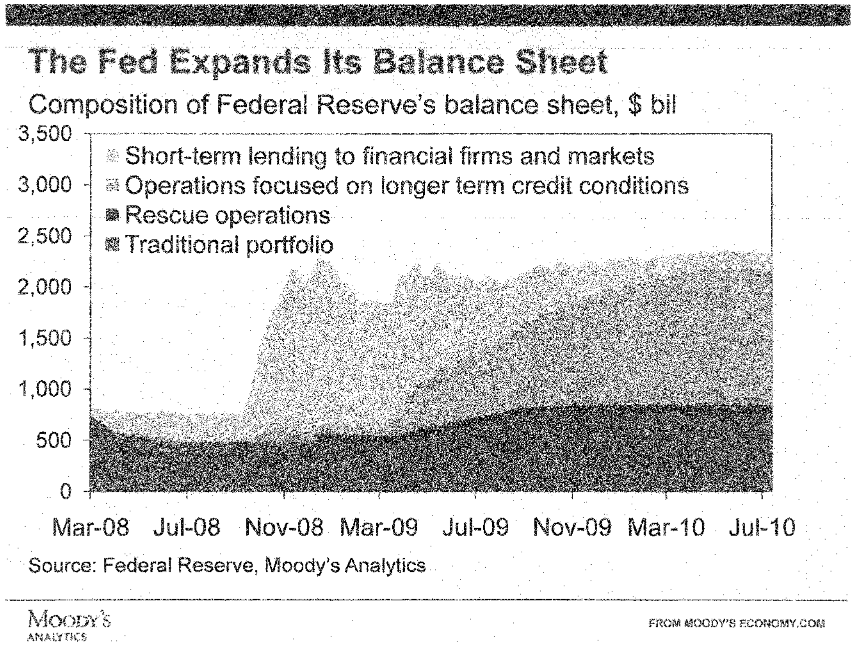
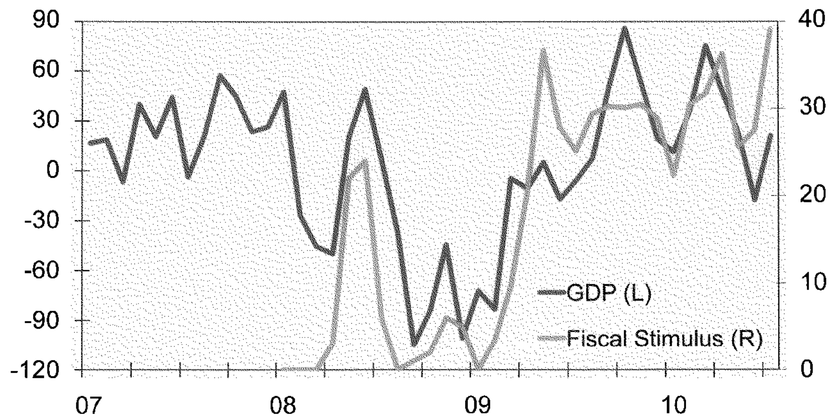


The Fed Expands Its Balance Sheet
Composition of Federal Reserve's balance sheet, $ bil
Short-term lending to financial firms and markets
Operations focused on longer term credit conditions
Rescue operations
Traditional portfolio
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Mar-08 Jul-08 Nov-08 Mar-09 Jul-09 Nov-09 Mar-10 Jul-10
Source: Federal Reserve, Moody's Analytics
MOODY'S ANALYTICS
FROM MOODY'S ECONOMY.COM

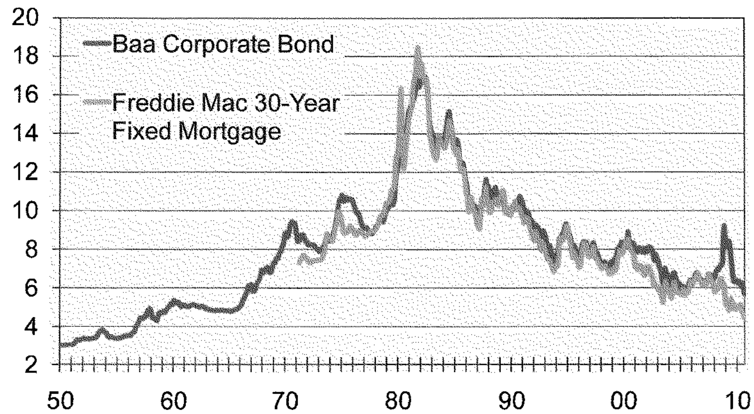
A Close Link Between Stimulus and Real GDP

Change, Billions 2005$



Sources: Macroeconomic Advisors, Moody's Analytics

Long-Term Rates Approach 50-Year Lows



Sources: Moody's Investor Services, Freddie Mac

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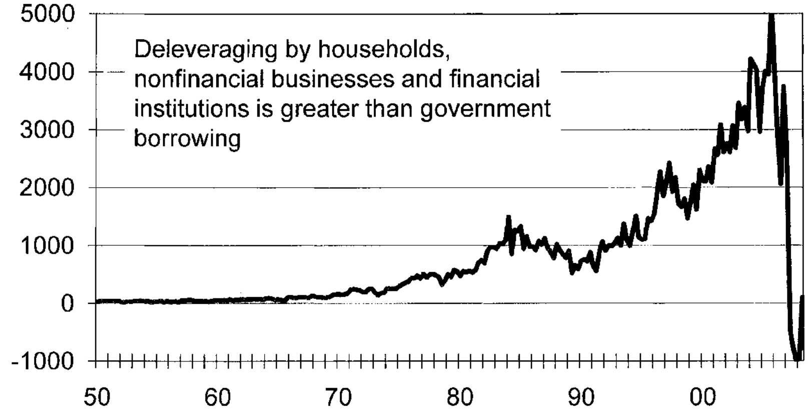
No Credit Growth

Total domestic credit growth, Billions $



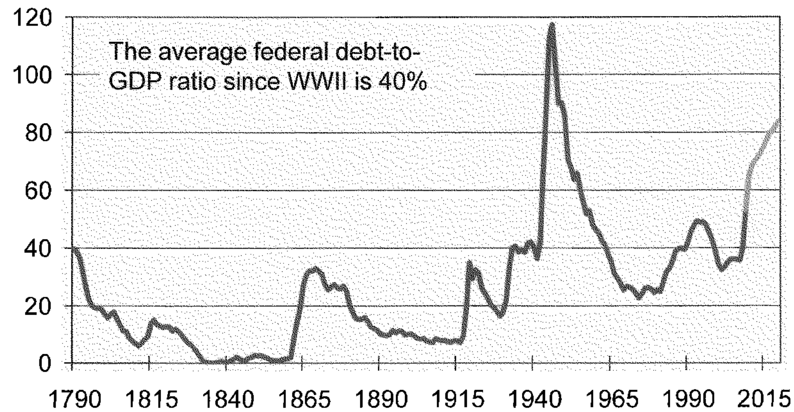
Source: Federal Reserve Board, Moody's Analytics

MOODY'S ANALYTICS

FROM MOODY'S ECONOMY.COM

Policymakers Must Change This Outlook…

Federal debt-to-GDP ratio



Sources: Treasury, Moody's Analytics

MOODY'S ANALYTICS

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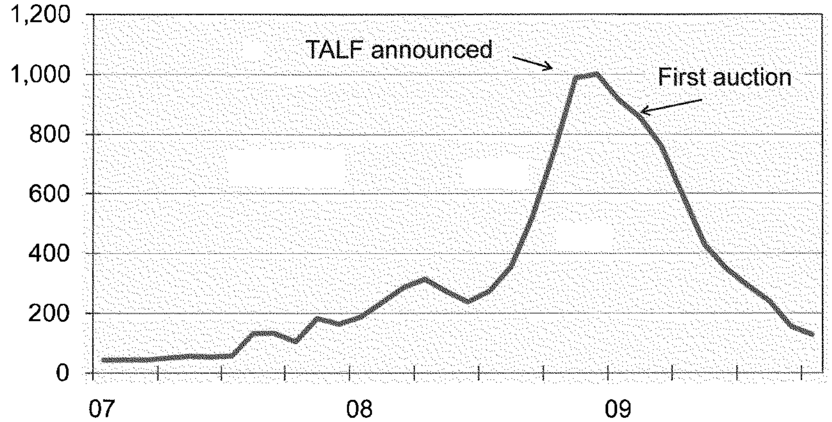
TALF Caused ABS Spreads to Narrow

Automobile ABS, option-adjusted spread, bps



Source: Bank of America/Merrill Lynch

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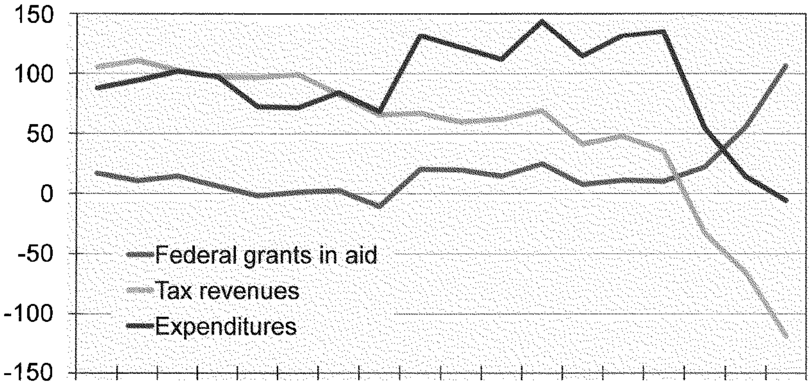
States Avoid Massive Budget Cutting

Change year ago, $ bil

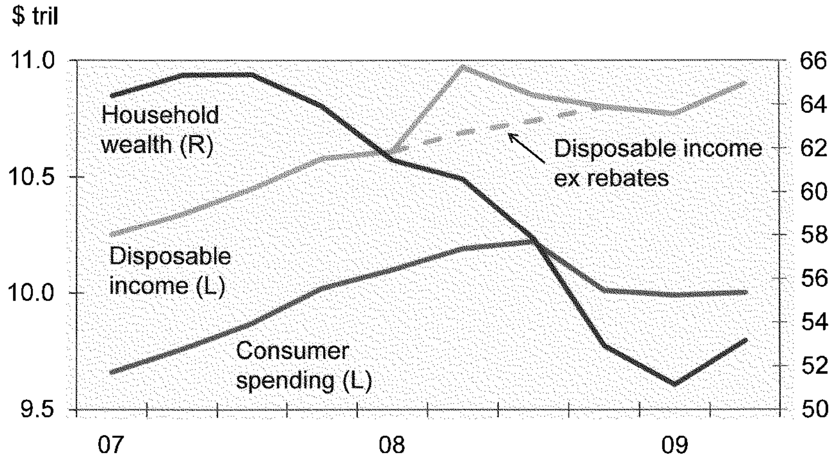


Source: BEA

Moody's Analytics

FROM MOODY'S ECONOMY.COM

Tax Cuts Have Supported Consumer Spending



Sources: BEA, FRB, Moody's Analytics

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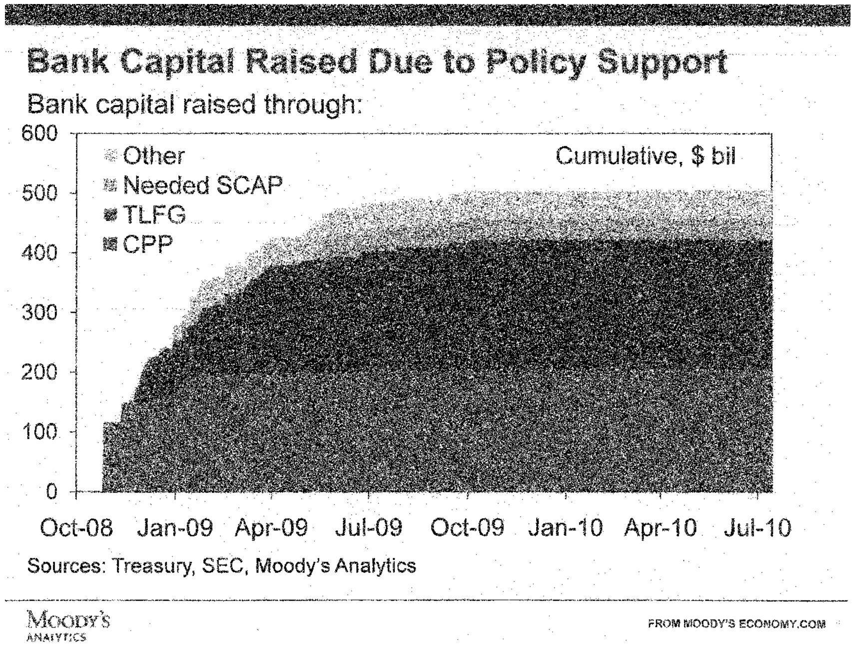
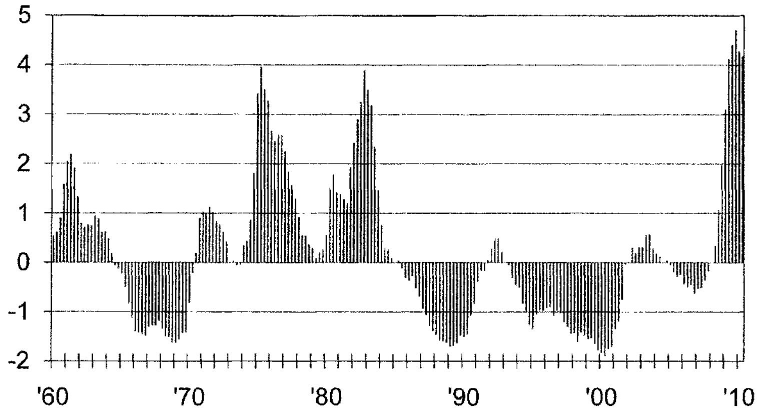

Bank Capital Raised Due to Policy Support
Bank capital raised through:
Other
Needed SCAP
TLFG
CPP
Cumulative, $ bil
600
500
400
300
200
100
0
Oct-08
Jan-09
Apr-09
Jul-09
Oct-09
Jan-10
Apr-10
Jul-10
Sources: Treasury, SEC, Moody's Analytics
Moody's
ANALYTICS
FROM MOODY'S ECONOMY.COM

The Output Gap is Wide

Difference between actual unemployment rate and NAIRU



Sources: BLS, Moody's Analytics

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The CHAIRMAN. Thank you very much.
Dr. Taylor?

STATEMENT OF JOHN TAYLOR, PH.D., MARY AND ROBERT RAYMOND PROFESSOR OF ECONOMICS, STANFORD UNIVERSITY, GEORGE P. SHULTZ SENIOR FELLOW IN ECONOMICS, THE HOOVER INSTITUTION

Dr. TAYLOR. Thank you, Mr. Chairman, Senator Gregg, for inviting me and other members of the panel.

I want to first start out by reminding everybody of the obvious. It has been 3 years, more than 3 years since this crisis began in August of 2007, and the economy is still operating way below its potential. We have got an unemployment rate of 9.6 percent and a growth rate of 1.6 percent.

What I have tried to do, and I will testify about this briefly, is to look at the impact of the policy responses to the crisis. But just on the face of it, it seems like they haven't done very good. But we have got to go beyond that and look at the details, look at the facts.

For the last 3 years, we have been working on this at Stanford University, at the Hoover Institution, trying to look at all aspects of these policies. And I have listed on three pages of my testimony, which I would like to refer to, a summary of that research. It is empirical. It is fact based. It is looking at the details of as many programs as we can possibly do. And based on that, I come to some conclusions, which I am prepared to defend.

First, if you look at the fiscal policy response to the crisis, it has been mainly in the form of what I would call discretionary short-term stimulus packages. In my view, these packages did not stimulate the economy much, if at all. And I based my conclusion on empirical research, looking at the specific actions taken.

So, for example, some part of the stimulus package was to send checks to people or to temporarily reduce their withholding. When you look at these changes, you don't see any impact on consumption in the aggregate. In other words, the purpose of these changes was to jumpstart consumption and thereby jumpstart the economy.

You can look at the timing. You can look at the increases in the income associated with this, and you see almost no changes in consumption at those times. So, again, if you look at the details, you don't see the impact of these policies.

Another big part of the stimulus packages was to increase Government purchases. We have the various kinds of models that might predict that those increase in Government purchases would stimulate demand and stimulate the economy. Well, here, I also find very little impact on the recovery. And if I could ask you to look at page 3 of my testimony, I have a couple of charts, which I think illustrate this quite well, and if I just could dwell on these for a minute or so?

The chart at the top shows real GDP growth. That is the blue line. Real GDP growth, and you can see how it plummeted in the recession and how it has recovered to some extent, but it is slowing down again now. You can also look at how much Government purchases has contributed to those changes in growth, and you can look at other parts of spending that has contributed.

The top part of the graph shows the contribution of investment—business fixed investment, inventory investment—to those changes in real GDP. They are part of real GDP. So the Commerce Department tabulates these data, and you look at them very clearly, and what you can see is the recovery, to the extent we have had one, has been due to investment.

If you look at the bottom part of the chart, you can also see how much of the contribution to this up-and-down, down-and-up in the economy has been due to purchases, both at the Federal level—non-defense Federal purchases are indicated—and also at the State and local level. And you see almost no impact of these changes. So, to me, this is what I mean by looking at the facts, looking at the numbers, and there is very little impact.

Now you might ask, how could an $862 billion package have so little impact on Government purchases? Well, the truth is, much of this package has not been in Government purchases. Believe it or not, in the six quarters since the package has been in place the total amount of Federal purchases for infrastructure projects has been $2.4 billion. That is 0.3 percent of the total package.

Now more of it could have been at the State and local level. After all, the package did send grants and aid in capital grants to the States. But if you look at this, you see very little connection between the grants being spent and the infrastructure that is actually being constructed. It is very hard to trace any difference, and my statistical work shows very little connection. So I think that is why you see that this just really has not worked.

Now you can also use models, and Professor Blinder and Professor Zandi have looked at models. The problem with models—and I have been a modeler for almost my whole career—is that you get different models, and they disagree. So the work that has been used by Blinder and Zandi uses a particular model—Mr. Zandi's model, I believe. But if you look at other models, you get different results.

In January of last year, when the administration put out a study to show that the stimulus package would work, my colleagues and I did a study showing with another model, a model we favored, that it wouldn't have much impact, maybe a quarter of the amount or a fifth of the amount.

And so, you could look at models—the IMF has a model. They have very small impacts. So the models differ, and that is why I think it is so important to go beyond the models—models are useful—but go beyond the models and look at the data themselves.

Now, of course, the other big part of the Federal response was monetary policy, and I have looked at this extensively. I don't have time to look at the details, but I think it is useful to divide the crisis, which again began in August of 2007, into three periods. The first period I will call the pre-panic. That occurred from August 2007 until the panic in the fall of 2008.

Then you had the panic, and that was when the stock market plummeted. The interest rate spreads that Mark Zandi showed you rose tremendously. That is the panic. And then you had the post-panic period, which I think really begins in November of 2008.

So if you look at the policies in these three periods, I look at the pre-panic period. I see the impact of the monetary policy actions as not being very constructive. The Fed used its balance sheet to bail out some firms and not other firms. It established some programs which drew attention away from counterparty risk in the banking sector and I think ultimately was part of the reason we had this panic in the first place, the confusion over those ad hoc bailouts.

Then you had the ending of the panic, which I believe was finally when the TARP was clarified what the TARP was used for. There was tremendous uncertainty in the first 3 weeks after the TARP was proposed. That was the panic period. As soon as it was indicated that the money would be used for equity injections, the panic stopped, and we saw mass improvements.

I think some of the Federal Reserve's actions during the panic period were helpful in stemming the panic. But if you think that they may have caused the panic in the first place, you might not applaud so much.

And then, finally, in the post-panic period, these are the large-scale purchases of assets by the Fed, the mortgages. My estimates, my statistical work on this shows that they did not have very much effect on reducing mortgage spreads, and those are based on looking specifically at the risk premiums in the mortgage market.

So it seems to me that you look at these details, these packages did not do very much good. In fact, now with the legacy of the debt, the legacy of the uncertainty in the economy that they have caused, I think very well they could be causing harm and holding back the recovery.

There were other policies that could have worked better. In fact, in testimony before this committee almost 2 years ago, November 2008, I recommended a set of policies. First of all, there would have been a commitment not to raise taxes for the foreseeable future. I hope that can still be a policy.

Second, it would have been to make President Obama's middle-class tax cut permanent. It was a temporary tax cut. Why would you do that? It doesn't affect the economy much at all. Should have made it permanent. That is what I recommended.

Should have had a Government spending policy that was dedicated to moving up the spending that was already on the books in a responsible way that laid out then a policy to get the budget deficit down in the long run. Not wait until now or not to wait until the commission has finished. It would have been far much better.

But instead, rather than being predictable, the policy I think created uncertainty. Rather than being permanent, we had these temporary changes, and that is why we don't have a lasting recovery.

So I think the good news is that we can change things. We can go back to the kind of principles that we know have worked in the past and get away from these temporary targeted types of policies, which are really leading to uncertainty and, I believe, holding the economy back.

Thank you very much.

[The prepared statement of Dr. Taylor follows:]

Assessing the Federal Policy Response to the Economic Crisis

Testimony before the
Committee on the Budget
United States Senate

John B. Taylor
Mary and Robert Raymond Professor of Economics, Stanford University and
George P. Shultz Senior Fellow in Economics at the Hoover Institution

October 22, 2010

Thank you, Chairman Conrad, Ranking Member Gregg, and other members of the Senate Budget Committee for inviting me to testify on the role of federal policy in the economic crisis.

It has been more than three years since the economic crisis first flared up in August 2007, and the U.S. economy is still operating far below its potential. Unemployment is high at 9.6 percent. Economic growth is low at 1.6 percent. Hopes for a strong economic recovery were high after the fall 2008 panic phase of the crisis, but these hopes were dashed as the recovery fizzled and economic growth fell sharply this year compared to last year. Unfortunately, slow growth and high unemployment are projected to continue largely due to the drag of uncertainty about economic policy including the risks and burdens of the growing government debt.

The purpose of this testimony is to assess the impact of federal economic policy related to the crisis. I have written and testified earlier about the role of federal policy in *causing* the crisis, including the role of monetary policy in keeping interest rates too low for too long leading up to the crisis, the role of Fannie Mae and Freddie Mac in encouraging the origination of risky mortgages, and the role of regulatory policy in failing to administer effectively financial regulations on the books.

Here I focus on the overall *response* of federal policy to the crisis, including fiscal policy and monetary policy. I draw on and summarize the results of a research project (described in the appendix) in which I have been engaged at Stanford University during the past three years. The main purpose of the research is to provide a comprehensive empirical evaluation of policy and thereby draw policy lessons for the future.

Fiscal Policy Responses

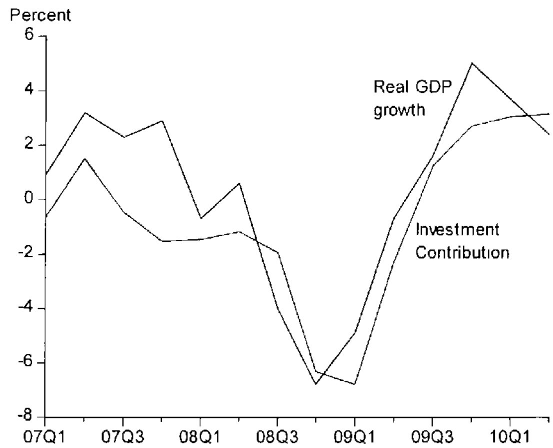
The federal fiscal policy response to the economic crisis mainly took the form of discretionary short-term stimulus packages. In my view these did not stimulate the economy much if at all. Now, rather than leaving the economy in a stronger growth position, the interventions have weakened the economy and left it with the burdens of increased debt and higher government spending as well as concerns about future tax increases. While the cash-for-clunkers and the first-time home buyers programs moved purchases forward by a few months, they did not increase economic growth on a more permanent basis.

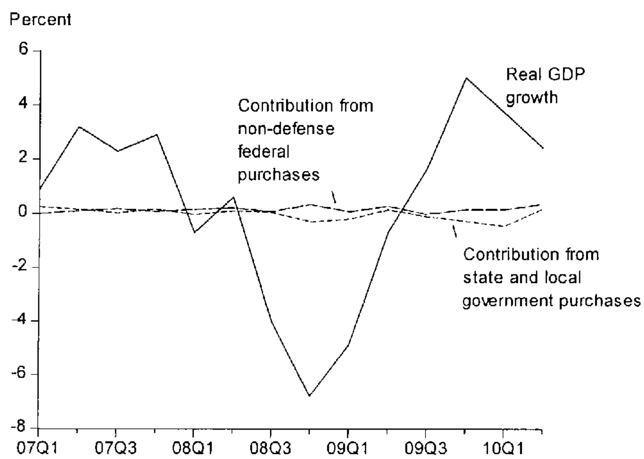
I base my conclusions on empirical research that examines the direct impacts of different components of the stimulus packages as well as on basic economic theory including the theory incorporated in modern econometric models. First consider the American Recovery and Reinvestment Act of 2009. One component of this stimulus package focused on temporarily increasing people's disposable income by sending checks, temporarily increasing tax credits, and correspondingly reducing withholding. The objective of this part of the package was to jump-start consumption demand and thereby jump-start the economy. Aggregate disposable personal income did jump at the start of the stimulus; however, aggregate personal consumption expenditures did not increase by much if at all around that time. If you examine data at the aggregate level, the stimulus package had no noticeable effect on consumption. The same was true of the fiscal policy response passed in February 2008 in which checks were also sent to people on a one-time basis. Disposable income rose but there was no noticeable increase in personal consumption expenditures. It is important to emphasize that this is what well-known economic principles—in particular the permanent income theory and the life cycle theory of consumption—would predict from such temporary payments. In other words the small impact of the policy response is exactly what one would have expected based on economic reasoning.

Next consider the government purchases part of the stimulus package of 2009, also designed to stimulate economic growth. An examination of what actually happened indicates that such purchases had little to do with the recovery in economic activity, and they have not prevented the recent slowdown. Data from the Bureau of Economic Analysis provide the evidence: Changes in government purchases did not correlate with the changes in economic growth from recession to recovery. On the contrary, most of the recovery last year has been due to investment—including inventory investment—and has little to do with the discretionary stimulus package.

The two charts below illustrate the story in simple graphical terms. The first chart shows the growth rate of real GDP and the percentage contribution to that growth from private investment, including inventory investment. Note that real GDP growth declined in the recession, then began to increase in the recovery, and now has slowed down again. Note also that the changes in investment are closely correlated with these ups and down in the economy.

The second chart shows the contribution of both nondefense federal government purchases and state-local government purchases of goods and service to the growth rate of GDP. Contributions from defense spending are not shown because they were not part of the stimulus package. Note that these government purchases have little to do with the ups and downs of GDP during this period. If the increase in government spending in the stimulus package actually increased real GDP growth and created jobs, one would likely have seen a more noticeable effect in the decompositions. The impact of government purchases is particularly small in comparison with investment. Changes in consumption and net exports (not shown here) are also more significant than the changes in government purchases, but the main story is investment.





Decompositions of Real GDP Growth into Contribution Due to Investment (upper graph) and Contribution due to Government Purchases (lower graph).
Source: Bureau of Economic Analysis

How can the contributions of the change in government purchases be so small given that the stimulus was $862 billion? One reason is that the part of the package explicitly devoted to federal purchases of goods and services was quite small. In fact, of the $862 billion package, the amount of government purchases at the federal level was $7.9 billion in 2009 and $10.5 in the first half of 2010 according to the Bureau of Economic Analysis. Focusing on infrastructure spending (gross investment) at the federal level the amount was even smaller: $.9 billion in 2009 and $1.5 billion in the first two quarters of 2010. Thus, of the total $862 billion only 3 tenths of a percent has been on federal infrastructure projects.

A larger amount of government purchases might be expected at the state and local level, and indeed grants by the federal government to the states were a large part of the stimulus package of 2009. However, uncertain timing by which state governments spend federal grant money as well as the fungible nature of grant funds makes it difficult to translate grants into purchases. In fact, both government gross investment (infrastructure) and government consumption purchases at the state and local level have declined since the economic crisis began. Moreover, according to aggregate statistics they show little positive association with the federal grants to state and local government once one controls for the state of the economy and other sources of receipts. In any case there is little evidence that on balance the stimulus packages increased government purchases at the state and local level.

One could posit other counterfactuals in which state and local government spending might have declined by a larger amount without the stimulus, but more research is needed to determine what would have happened in the counterfactual of "no discretionary stimulus." In the meantime these data at the least suggest that the recovery and the slowdown have been due to changes in investment not government purchases.

Another approach to evaluate the impact of the response of policy is to use econometric model simulations. However, in most attempts to evaluate policy using models, the results are built in to the models, and were built in well before the stimulus package was enacted. Frequently the same economic models that said, a year and half ago, that the impact would be large are now used to show that the impact is in fact large. In other words these assessments are not based on the actual experience with the stimulus.

For example, economists John Cogan, Volker Wieland, Tobias Cwik and I raised questions about the robustness of estimates of the impact of the stimulus package soon after they were released by the Administration (in a white paper by Christina Romer and Jared Bernstein) in January 2009. Their estimates were based on models which were much different from more modern models which take account of expectations of the future, including increases in debt and future taxes. We found the economic impacts to be much smaller using the more forward looking models than the older Keynesian models. Since then many technical papers have been written on this subject and in my view the consensus is that the impacts of the stimulus package are much smaller than originally reported by the Administration.

Another example is the recent working paper by economists Alan Blinder and Mark Zandi on the impact of federal stimulus policies. In this case, the policies are run through a model and the paper reports what the model says would happen. It does not look at what actually happened, and it does not look at other models. I explained the defects with this type of exercise in testimony at a July 1, 2010 House Budget Committee hearing. I showed that the results are entirely dependent on the model: old Keynesian models show large effects and more modern models show smaller effects.

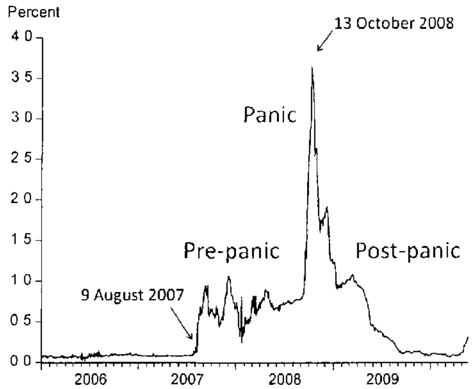
Other evidence from models comes from an International Monetary Fund study which reports estimates of government spending impacts which are much smaller than those previously reported by the Administration. The IMF uses a very large complex model called the Global Integrated Monetary and Fiscal (GIMF) Model. It shows that a one percent increase in government purchases (as a share of GDP) increases GDP by a maximum of 0.7 percent and then fades out rapidly. This means that government spending crowds out other components of GDP (investment, consumption, net exports) immediately and by a large amount. The IMF estimate is much less than the impact reported in the Romer and Bernstein paper.

Monetary Policy Responses

In evaluating the monetary policy response to the crisis, I think it is useful to divide the crisis into three periods. (1) The period from the flare-up of the crisis in August 2007 to the panic in late September 2008. (2) The period of the panic from late September through October 2008. (3) The period after the panic.

The three periods are illustrated in the following chart which shows a frequently used measure of financial stress in the interbank market: the interest rate spread between the 3 month interbank lending rate (Libor) and the expected federal funds rate over the same 3-month period (OIS). Note how the beginning of the economic crisis is quite evident in August 2007 and that the panic begins in late September 2008 and reaches its peak in October 2008.

Three Phases of the Crisis: Pre-Panic, Panic, Post-Panic



Libor – OIS Spread

The main monetary policy responses to the crisis were a cut in the federal funds rate and the use of the Fed's balance sheet to finance massive and extraordinary lending and securities purchase programs. The Federal Reserve cut the federal funds rate by two percentage points during the panic and this helped to counteract the rising interest rate spreads and thereby alleviated some of the negative impacts of the panic. In my view, however, the cuts in early 2008 were at times too sharp and erratic and may have caused a depreciation of the dollar and thereby rising oil prices, which had negative effects on the economy.

By far the most unusual response of monetary policy to the economic crisis, however, was the massive extraordinary measures in which the Federal Reserve used its balance sheet. I assess their impacts during the three phases mentioned above.

My assessment of the extraordinary monetary measures that were taken in the year before the panic is that they did not work, and that some were harmful. The Term Auction Facility (TAF) did little to reduce tension in the interbank markets during this early period, as I reported in research at that time, and it drew attention away from counterparty risks in the banking system. The extraordinary bailout measures, which began with Bear Stearns, were the most harmful in my view. The Bear Sterns actions led many to believe that the Fed's balance sheet would again be available in the case that another similar institution failed. But the Fed closed its balance sheet in the case of Lehman Brothers, and then reopened it again in the case of AIG. It was then closed off again for such bailouts and the TARP was proposed. Event studies show that the roll out of the TARP coincided with the severe panic. So I have to disagree with those who view all the extraordinary interventions as having worked.

The panic period is the most complex to analyze because the Fed's main measures during this period—those designed to deal with problems in the money market mutual fund and the commercial paper markets—were intertwined with the FDIC bank debt guarantees and the clarification that the TARP would be used for equity injections, which was a major reason for the halt in the panic. In any case, a detailed examination of micro data shows that the Fed's asset backed commercial paper money market mutual fund liquidity facility (AMLF) was effective. And I have argued that the Federal Reserve should also be given credit for rebuilding confidence by quickly starting up these complex programs from scratch in a turbulent period and for working closely with central banks abroad in setting up swap lines.

The main policy responses during the post-panic period were the large scale asset purchase programs. Much of the work evaluating these programs has been based on "announcement effects" which I think can be quite misleading. It is therefore necessary to look at the programs themselves—at the amount purchased and the timing—not just the announcement effects. Consider the impact of the Fed's mortgage backed securities (MBS) purchase program, which at $1.25 trillion is the largest single extraordinary program. My research on that program shows that it had a rather small and uncertain effect on mortgage rates once one controls for prepayment risk and default risk. If so, such a program is not an effective monetary instrument. The initial announcement of the MBS program on November 25, 2008 had a noticeable effect on mortgage spreads but the effects soon disappeared. The March 18, 2008 announcement effect of the extension of the program actually raised interest rate spreads, but it too was soon reversed.

Whether one believes that these unorthodox monetary programs worked or not, there are reasons to believe that their consequences going forward are negative. First, they raise questions about central bank independence. The programs are not monetary policy as conventionally defined, but rather fiscal policy or credit allocation policy because they try to help some firms or sectors and not others and are financed through money creation rather than taxes or public borrowing. Unlike monetary policy, there is no established rationale that such policies should be run by an independent agency of government. By taking these extraordinary measures, the Fed has risked losing its independence over monetary policy.

A second negative consequence of the programs is that unwinding them involves considerable risks. In order to unwind the programs in the current situation, for example, the Fed must reduce the size of its MBS portfolio and reduce reserve balances. But there is uncertainty about how much impact the purchases have had on mortgage interest rates, and thus there is uncertainty about how much mortgage interest rates will rise as the MBS are sold. There is also uncertainty and disagreement about why banks are holding so many excess reserves now. If the current level of reserves represents the amount banks desire to hold, then reducing reserves could cause a further reduction in bank lending.

A third negative consequence is the risk of future inflation. If the Fed finds it politically difficult to reduce the size of the balance sheet as the economy recovers and as public debt increases, then inflationary pressures will undoubtedly increase.

Conclusion

In conclusion I find that on balance the federal policy responses to the crisis have not been effective. Three years after the crisis began the recovery is weak and unemployment is high. A direct examination of the fiscal stimulus packages shows that they had little effect and have left a harmful legacy of higher debt. The impact of the extraordinary monetary actions has been mixed: while some actions were helpful during the panic stage of the crisis, others brought the panic on in the first place and have had little or no impact since the panic. The monetary actions have also left a legacy of a large monetary overhang which must eventually be unwound.

Is there another policy response which would have worked better or would work better in the future? In testimony entitled "The State of the Economy and Principles for Fiscal Stimulus" which I gave before this Committee nearly two years ago in November 2008, I recommended a different type of fiscal policy response to the crisis. The response was based on certain established economic principles, which I summarized by saying that policy should be *predictable, permanent and pervasive* affecting incentives throughout the economy. I argued "that there are many good fiscal packages that are consistent with these three principles. One would consist of the following": (1) Committing to keep income tax rates where they are, effectively making current income tax rates permanent. (2) Making the worker's tax credit, which President Obama had proposed, permanent rather than temporary. (3) Enacting a responsible government spending plan that met reasonable long-term objectives, put the U.S. economy on a credible path to budget balance, and would be expedited to the degree possible without causing waste and inefficiency. (4) Recognizing that the "automatic stabilizers" will help stabilize the economy, and therefore counting them as part of the overall fiscal package even though they do not require legislation.

This is not the kind of economic policy that has been followed. Rather than predictable, the policy response has created uncertainty about the debt, growing federal spending, future tax rate increases, new regulations, and the exit from the unorthodox monetary policy. Rather than permanent, it has been temporary and thereby has not created a lasting economic recovery. And rather than being pervasive, it has targeted certain sectors or groups such as automobiles, first time home buyers, large financial firms and not others. It is not surprising, therefore, that the policy response has left us with high unemployment and low growth. Given these facts, the best that one can say about the policy response is that things could have been even worse, a claim that I disagree with and see no evidence to support.

The good news is that we can get back to a strong recovery by following an economic policy based on these fundamental economic principles. As argued in a *Wall Street Journal* article "Principles for Economic Revival" published last week by George Shultz, Michael Boskin, John Cogan, Allan Meltzer and me, the experience of the past two years makes the case for doing so stronger than ever.

Appendix: Empirical Research Project on the Economic Crisis

The above testimony is based on an empirical research project on economic policy and the financial crisis at Stanford University and the Hoover Institution. The research began in the summer of 2007. The findings of this research have been reported in books, published research papers, and reports, which are listed for the record below. I have summarized the results in congressional testimony and in newspaper articles, which are also listed below. In order to download any of these items, go to www.JohnBTaylor.com

Books

Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis, Hoover Institution Press, Stanford, 2009, Translated into Italian, Spanish, Polish and Japanese

The Road Ahead for the Fed, with John Ciorciari (Eds.), Hoover Institution Press, Stanford, California, 2009

Ending Government Bailouts As We Know Them, with Kenneth Scott and George Shultz (Eds.), Hoover Institution Press, Stanford, California, 2010

Research Papers and Reports

"Housing and Monetary Policy," published in *Housing, Housing Finance, and Monetary Policy* proceedings of FRB of Kansas City Symposium, Jackson Hole, WY, September 2007.14

. "The Costs and Benefits of Deviating from the Systematic Component of Monetary Policy," Conference on Monetary Policy and Asset Markets Federal Reserve Bank of San Francisco, February 22, 2008

"The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong," *A Festschrift in Honour of David Dodge's Contributions to Canadian Public Policy*, Bank of Canada, November 2008, pp. 1-18. Reprinted in *Critical Review*, 21 (2-3), 2009, pp. 341-364

"Further Results on a Black Swan in the Money Market," with John C. Williams, Stanford Institute for Economic Policy Research, Discussion Paper No. 07-046, May 2008.

"A Black Swan in the Money Market," with John C. Williams, Federal Reserve Bank of San Francisco, Working Paper Series, 2008-04, April 2008.

"A Black Swan in the Money Market," with John C. Williams, *American Economic Journal: Macroeconomics*, 1 (1), January 2009, pp. 58-83.

"The Lack of an Empirical Rationale for a Revival of Discretionary Fiscal Policy," *American Economic Review: Papers and Proceedings*, 99 (2), May 2009, pp. 550-555.

"The Need to Return to a Monetary Framework," *Business Economics*, 44 (2), 2009, pp. 63-72.

"Systemic Risk and the Role of Government," Conference on Financial Innovation and Crises, Federal Reserve Bank of Atlanta, May 12, 2009

"The Need for a Clear and Credible Exit Strategy," in John Ciorciari and John Taylor (Eds.) *The Road Ahead for the Fed*, Hoover Institution Press, Stanford, 2009.

"Empirically Evaluating Economic Policy in Real Time," Inaugural Martin Feldstein Lecture, *NBER Reporter*, 3, July 2009.

"Should the G-20 Reconsider the Decision to Treble IMF Recourses?" *Renewing Globalization and Economic Growth in a Post-Crisis World: The Future of the G-20 Agenda*, Carnegie Mellon University Press, Pittsburgh, Pennsylvania, August 2009.

"Analysis of Daily Retail Sales Data during the Financial Panic of 2008," Working Paper, Stanford University, October 2009.

"Responses to Additional Questions from the Financial Crisis Inquiry Commission," November 2009

"Estimated Impact of the Fed's Mortgage-Backed Securities Purchase Program," with Johannes C. Stroebel, NBER Working Paper Number 15626, December 2009

"Government Actions and Interventions, More Harm Than Good?" *Development Outreach*, The World Bank Institute, Washington D.C., December 2009, pp. 50-53.

"Globalization and Monetary Policy: Missions Impossible," in Mark Gertler and Jordi Gali (Eds.) *The International Dimensions of Monetary Policy*, The University of Chicago Press, 2009, pp. 609-624

"Defining Systemic Risk Operationally," published in Kenneth Scott, George Shultz and John B. Taylor (Eds.) *Ending Government Bailouts As We Know Them*, Hoover Press, Stanford, California, 2010

"Better Living through Monetary Economics," in John Siegfried (Ed.) *Better Living Through Economics*, Harvard University Press, 2010, pp. 146-163.

"Getting Back on Track: Macroeconomic Policy Lessons from the Financial Crisis" *Federal Reserve Bank of St. Louis Review*, May/June 2010, 165-176

"Simple and Robust Rules for Monetary Policy," with John C. Williams, in Benjamin Friedman and Michael Woodford (Eds.), *Handbook of Monetary Economics*, 3, Elsevier, forthcoming, 2010

"New Keynesian versus Old Keynesian Government Spending Multipliers," (with John F. Cogan, Tobias Cwik, and Volker Wieland), *Journal of Economic Dynamics and Control*, Vol. 34, 2010, pp 281-295,

"Origins and Policy Implications of the Crisis," in Roger Porter (Ed.) *New Directions in Financial Services Regulation*, MIT Press, 2010

"Macroeconomic Lessons from the Great Deviation," *Macroeconomics Annual*, National Bureau of Economic Research, 2010

"Comment On 'Global Effects of Fiscal Stimulus During the Crisis,' by Charles Freedman, Michael Kumhof, Douglas Laxton, Dick Muir, Susanna Mursula," *Journal of Monetary Economics*, forthcoming, 2010

"Lessons from the Financial Crisis for Monetary Policy in Emerging Markets," L. K. Jha Memorial Lecture, Reserve Bank of India, Mumbai, February 24, 2010

"Does the Crisis Experience Call for a New Paradigm in Monetary Policy?" Presentation at the Warsaw School of Economics, Warsaw, Poland, 23 June 2010

"Commentary: Monetary Policy after the Fall," Presentation at the Symposium "Macroeconomic Challenges: The Decade Ahead" Sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 28, 2010

"Monetary Policy Implications of the Global Crisis," Presented at the *International Journal of Central Banking* Conference, Bank of Japan, September, 17 2010

Congressional Testimony

"Monetary Policy and the State of the Economy," Testimony before the Committee on Financial Services, U.S. House of Representatives, February 26, 2008.

"The State of the Economy and Principles for Fiscal Stimulus," Testimony before the Committee on the Budget, United States Senate, November 19, 2008.

"Monetary Policy and the Recent Extraordinary Measures Taken by the Federal Reserve," Testimony before the Committee on Financial Services, U.S. House of Representatives, February 26, 2009

"Monetary Policy and Systemic Risk Regulation," Testimony before the Committee on Financial Services, U.S. House of Representatives, July 9, 2009.

"Testimony," Subcommittee on Commercial and Administrative Law , Committee on the Judiciary United States House of Representatives , October 22, 2009

"An Exit Rule for Monetary Policy," Testimony on unwinding emergency Federal Reserve liquidity programs and implications for economic recovery" before the Committee on Financial Services, U.S. House of Representatives, March 25, 2010

"Perspectives on the U.S. Economy: Fiscal Policy Issues," before the Committee on the Budget, U.S. House of Representatives, July 1, 2010

Articles

"Why Permanent Tax Cuts Are the Best Stimulus," *Wall Street Journal,* November 25, 2008

"How Government Created the Financial Crisis," *Wall Street Journal,* February 9, 2009

"The Threat Posed by Ballooning Reserves," *Financial Times,* March 24, 2009

"Valid Complaints about Spending," *New York Times,* April 1, 2009

"Exploding Debt Threatens America," *Financial Times,* May 27, 2009

"Why Toxic Assets Are So Hard to Clean Up," *Wall Street Journal,* July 20, 2009

"Fed Needs Better Performance, Not Powers," *Financial Times,* August 10, 2009

"Taylor Rule Change Will Hurt Fed's Inflation Fight," *Bloomberg,* August 25, 2009

"The Coming Debt Debacle," *New York Daily News,* August 31, 2009

"The Stimulus Didn't Work," *Wall Street Journal,* September 17, 2009 (with John Cogan and Volker Wieland)

"Fuel for the Financial Fire," *Forbes Magazine,* November 2, 2009

"Analyzing the Impact of the Fed's Mortgage-Backed Securities Purchases," with Johannes C. Stroebel, *VoxEU.org,* January 27, 2010

"How to Avoid a 'Bailout Bill,'" *Wall Street Journal,* May 3, 2010

"Central Banks are Losing Credibility," *Financial Times,* May 11, 2010

"The Dodd-Frank Financial Fiasco," *Wall Street Journal,* July 1, 2010

"The Fed and the Crisis: A Reply to Ben Bernanke," *Wall Street Journal,* January 11, 2010

"What Should the Federal Reserve Do Next?" *Wall Street Journal,* September 9, 2010

"Principles for Economic Revival," (with George Shultz, Michael Boskin, John Cogan, and Allan Meltzer) *Wall Street Journal* September 16, 2010

The CHAIRMAN. Thank you, Dr. Taylor, for your thoughtful comments.

You know, this is very healthy. This is the kind of debate we need. I wish this kind of debate, this kind of discussion were more prevalent more broadly in our society at this point.

You know, I don't know why it is that we seem to get off on tangential, insignificant issues. This is what the American people deserve to hear, this kind of discussion at this level. So I thank the three of you for contributing in a serious way to a discussion.

The first thing I would like is to give each of you a chance to respond to anything that you heard from others testifying here that you—something you heard that you feel should be responded to. Dr. Blinder, anything that you heard here from Dr. Zandi or Dr. Taylor that you would want to take issue with or respond to?

Dr. BLINDER. Just a couple of things. I am sorry. Very briefly, a couple of things that Dr. Taylor mentioned, starting with the last.

He is quite correct that when it comes to income taxes, though not to many other kinds of taxes, if you make the cut temporary, you dull its effect. But I don't think you eliminate its effect. I think there is lots and lots of evidence that cash income matters. But you do reduce the effects.

The problem, however, is where you sort of started the hearing, that we are in a simply horrendous long-run fiscal position and unable to afford permanent tax reductions anymore. I don't think we could afford the ones we did in 2001, 1902, 1903. But we certainly can't afford more, given the state of the economy, and that is what leads you to temporary.

And under that heading, it is sensible to come up with ideas where temporariness may either not undermine or possibly even enhance the effectiveness of a tax cut. For example, the liberalization of depreciation, if done on a temporary basis, probably has stronger effects than it does if it is done permanently.

Following that point, the argument is often made that well, you are just pulling spending forward, so you will create a dearth of spending later. That is true, but it is not an argument against the policy. Recessions are not going to last forever.

Anti-recession policy is, in large measure, about pulling spending forward to fill in holes that we have on the belief, supported by lots and lots of evidence, that economies do recover on their own and are going to need support in the future, although they need it longer in really deep recessions, such as the one we are having.

That is germane, for example, to tax Cash for Clunkers program that Mark Zandi was speaking about. Yes, it pulled spending forward and caused there to be less automobile spending after the Cash for Clunkers program expired. That is what it was supposed to do.

Now, I think Congress made it much too short. I don't think it made a lot of sense to pull spending 3 months forward. We needed to pull it a year forward or something like that. But nonetheless, the principle was correct.

The CHAIRMAN. Dr. Zandi?

Dr. ZANDI. I would like to focus on an area of agreement that I have with Dr. Taylor, and that is with regard to the need for consistent and clear policy. And I think the need for this is vividly illustrated in what Dr. Taylor labeled the pre-panic period. I do think it is fair to say that the lack of consistency with respect to how policymakers treated financial institutions during that period is what caused the financial crisis to devolve into a panic, beginning with Bear Stearns, extending to Fannie Mae and Freddie Mac, to Lehman Brothers, and then some of the other subsequent failures.

Each institution was treated very differently, and it created a great deal of uncertainty in the minds of creditors, who ultimately provide the liquidity to the financial system that makes it all work. So they just ran for the door.

So it was that lack of consistency and clarity that I think precipitated the panic and the mess that we got ourselves into. We would have had a financial crisis regardless and a recession regardless, but we got a panic and a great recession because of those missteps. So I would agree with that, and I think that is important to try and guide policy going forward. I think it is now very key for policymakers to try to provide clarity and consistency, that the uncertainty is a real problem.

I am not arguing that we shouldn't have had these big debates in healthcare reform and financial regulatory reform. How could we go through a financial crisis and not have regulatory reform? You may disagree with the reform we got, but we had to go through it. It is just part of the process, and I think, in my view, ultimately, it will be therapeutic.

But at this point, I think it is very, very important that policy work much more judiciously so that everyone knows what the rules of the game are. Because, otherwise, businesses aren't going to start deploying that cash, and we are not going to get the job creation that we need.

The CHAIRMAN. Dr. Taylor?

Dr. TAYLOR. One of the problems with the temporary policies that Professor Blinder is referring to, in addition to the fact that they don't stimulate consumption very much, is that they don't get the economy growing. It is not true that you want to have policies that just push some money out there and then take it away. That is not—we want a strong, growing economy, a sustainable growth.

So, for example, keeping the tax rates from rising now. That is something that affects incentives, that affects longer-term growth, businesses can plan for the next 2, 3, 4 years. And so, I think the permanency has to do with predictability, and it is very important to stress.

I would just say one other thing in terms of permanent leaving, say, the tax rates where they are for the foreseeable future. I think it is important to note that we have had a massive increase in Government spending recently.

Just some statistics—last week, I had an op-ed in the Wall Street Journal, along with George Shultz and Michael Boskin, John Cogan and Allan Meltzer, kind of outlining a strategy for the future. But we noted that Government purchases as a share of GDP were 18.2 percent in 2000. They are now 24 percent. And as you know from the chart, CBO is projecting they are going up to 30, 40, 50, and who knows what.

So 18.2 percent in the year 2000. They are now 24 percent of GDP, and they are going up. I think there is a lot of room here on the spending side, and that is really the problem with our deficit. It isn't the taxes.

Thank you.

The CHAIRMAN. Senator Gregg?

Senator GREGG. Thank you, Senator Conrad.

Gee, so much has been said here that is thoughtful and extraordinarily informative, but also very, hopefully, listened to. This is an exceptional panel of talented people—Princeton, Stanford. I know that Dr. Zandi would want to affiliate himself with Dartmouth because it doesn't appear to be identified with anybody.

[Laughter.]

The CHAIRMAN. You will have your chance, Dr. Zandi.

Senator GREGG. One message I think I am hearing, and disagree with me if I am wrong, is that to the extent temporary is done in this type of an atmosphere where we are facing a long-term debt crisis of inordinate proportions, it should have been coupled with long-term action that corrected the long-term debt crisis, as well as addressed a temporary solution. Is there a consensus that that was what we should have done?

Dr. ZANDI. In an ideal world, yes.

Dr. TAYLOR. Yes.

Dr. BLINDER. Yes, but, and it is the ideal world. Having participated in the frenzy of redoing the Federal budget, a thorough-going deficit reduction program at the beginning of the Clinton administration, I think to have asked the Obama team, in addition to all the short-run things they were doing, to also remake the Federal budget in 6 weeks would have been asking a lot.

Senator GREGG. Yes, but that is when they had the opportunity and we probably had the Congress, which was ready to act, hopefully, because it was a new Congress——

Dr. BLINDER. I agree with that in principle completely.

Senator GREGG. And as a very practical matter, an economic recovery is—I think a lot of people have been talking about uncertainty—would have been significantly increased and would be significantly increased if we could give some certainty to the American people and to the international community that we were actually going to address our long-term financial problems. Is that not true?

[Witnesses nodding.]

Senator GREGG. I will take the nods as yes. Which we aren't. I mean, it is a simple statement, but we haven't done it.

The CHAIRMAN. Can I just give them a chance to answer your question because the nods will never be captured on the record.

Senator GREGG. OK. Please, to what extent is getting some long-term action—getting some action on our long-term fiscal instability critical to a stronger, healthier economy that produces jobs? If you could just give us your one-sentence thoughts on that?

Dr. ZANDI. I think that would be critical. I think if we could do that, that would lay the foundation for much stronger economic growth and much stronger growth in our living standards for a long time to come. That would be a vital thing that we could do.

Dr. TAYLOR. I agree. It would have to be credible, of course, not just a matter of laying out a plan. An especially, I think, bad approach would be to say we will start in 2 years. You have got to start when you make the plan. I think that would be very helpful in terms of creating certainty.

Dr. BLINDER. Well, I think—I do agree that it is important for the long run. The tricky aspect of this comes exactly where John Taylor just finished off, which is what do you do about the short run?

The economy is not in a position where it can take a fiscal contraction right now, whether that means higher taxes or lower spending. So the key difficulty facing the Congress now, I think, is to legislate or in other ways lock in future deficit reduction. This is a hard thing to do, as you all know. Again, in an ideal world, that is exactly what you would do. You would commit the Government to do substantial fiscal contraction, starting a few years from now. But since you don't do it now, that is hard to make credible, quite hard.

Senator GREGG. Dr. Taylor, you made one statement that sort of startled me because I didn't realize this number was so out of whack. You said that in the first six quarters of the stimulus, only $2.4 billion has gone into infrastructure, of the $861 billion, which is actually $1.1 billion when you throw the interest rate cost on top of it. Is that correct?

Dr. TAYLOR. Yes, that is the Federal—at the Federal level, and that is data produced by the Bureau of Economic Analysis. I can give you the tables for that.

Senator GREGG. No, I just wanted to confirm that number. If the stimulus had been—let us take a threshold assumption here, which a lot of my colleagues and maybe myself wouldn't even go to. But if the stimulus was going to be done, shouldn't it have really pushed the money out the door on infrastructure improvement for long-term benefit and for immediate activity?

Dr. TAYLOR. Absolutely. I think there were lots of projects that had passed cost-benefit tests that were useful. Probably some of them were process already. They could have been brought forward so you actually get the people with the jobs at the start. And for many reasons, this has been delayed. I think sometimes this is the way Government works. It is hard to——

Senator GREGG. Well, you are absolutely right. That is the way Government works. When this stimulus was put together, so much of it basically became, as I said earlier, walking around money for appropriators. You had your program that you had been trying to fund for years. You hadn't been able to find the money. Suddenly, you funded it, and the funding may be spent 2 or 3 years from now.

Well-intentioned programs, but I don't think they really encouraged economic activity, and I don't think they went—another corollary issue which infrastructure does, which is it makes us a more competition nation of capital investment.

Dr. ZANDI. Senator, can I make a quick point about that?

Senator GREGG. Sure.

Dr. ZANDI. The total amount of infrastructure spending appropriated in the all of the stimulus back to the Bush tax rebates, if you total up all the stimulus, all the money appropriated, it is $1.1 trillion. That is the total amount of stimulus. Of that, $38 billion was infrastructure spending. So it was always a very, very small piece of the pie.

Senator GREGG. That was a problem. My point is that was why the stimulus——

Dr. ZANDI. And even under the best of circumstances, it is hard to see how you get that out quickly if you want to make sure that you are doing good projects.

Senator GREGG. Well, there are a lot of bridges that need to be fixed in New Hampshire. We had a highway director when I was Governor who said about the bridges "drive fast and don't look back." So——

[Laughter.]

Senator GREGG. He was a good director. He just shouldn't have been quoted so often.

Just on aside here, I was interested in your chart which showed the effects of TARP and your argument that the TARP was a slam dunk. It has obviously become a pejorative because I think it has been misrepresented as to what it actually it did, and terminology has picked up its own purposes as versus being tied to what actually it did.

But, really, the bringing down the LIBOR rates was purely an exercise of intervention by the Treasury through TARP, by the FDIC, and by Federal Reserve action, wasn't it?

Dr. ZANDI. Yes. Those actions were key to restoring financial stability, which was represented in the narrowing of that spread.

Senator GREGG. They weren't tied to the stimulus initiative, however?

Dr. ZANDI. No. That is a separate policy response.

Senator GREGG. Right. I mean, the two policies get wrapped up together.

Dr. ZANDI. Yes. Yes, I am sorry. Yes.

Senator GREGG. One was trying to address a crisis where we were at a cliff. We were going over the cliff, or we were on a bridge that was about to fall in, and we decided to fix the bridge. The other addressed the issue of economic activity——

Dr. ZANDI. But I should say in the work that Alan and I did and the results that were presented, they represented the impact of both aspects of that response, the stimulus as well as——

Senator GREGG. Right. I noticed you had a whole lot of things in there, and I was just trying to separate out the parts that I happen to think actually worked right——

Dr. ZANDI. OK.

Senator GREGG [continuing]. Which was the TARP part and the financial intervention by the Fed and the FDIC to stabilize the financial markets as versus the stimulus package, which I found to be less than—well, I think the comment, which was made by you, Dr. Taylor, which is, in the long run, it may end up being a negative because it is going to add to the debt in a way that basically gets us very little for it.

My time is up, but I thank you for the panel. Yes, did you want to make a comment?

Dr. TAYLOR. On the issue about the end of the panic, the panic, as measured by the TED spread, my paper has—my testimony has the spread between LIBOR and the Federal funds rate at I think a slightly better measure, but it is very similar.

The worst part of the panic was the period from the announcement of the TARP until the TARP was clarified how it was going to be used. There was a tremendous uncertainty. "How are we going to buy these toxic assets?" is the way it was frequently put. And that really stopped as soon as there was some clarification.

You might not like the clarification. But on October 13th, a meeting of the Treasury, it was made clear that these were for equity injections, and then things improved. That is how I think of this. So, in some sense, the cause of these spreads was the action. And fortunately, people reacted and fixed the problem before it was finished.

Senator GREGG. And just as a point of editorial comment, it was lucky that we drafted the TARP in the way that gave the Treasury Secretary that flexibility because he could never have bought the toxic assets as it turned out and gotten the bang for the buck that he got by buying equity.

The CHAIRMAN. Let me just make three kind of parenthetical observations. One, when the President was elected, but before he took office, I wrote him a letter urging that when we do stimulus, we simultaneously make a commitment to long-term deficit reduction so that we signal the markets and we signal people that we recognize the increase in deficits and debt have got to be dealt with and that the debt is a serious overhanging threat.

Second, as we went through the question of recovery package, I fought for $200 billion of infrastructure rather than $38 billion. We lost that fight. I still believe we would have been much better off, for the reasons the Senator gave. And you know, we will never know.

But I think if you look at the Recovery Act package, the parts of that package that are the weakest are the exact ones Senator Gregg is referencing that were basically appropriators taking money for programs they had long wanted to fund, regardless of bang for the buck. And a lot of it was stuff that wasn't particularly strong on a bang for the buck evaluation.

Senator Stabenow?

Senator STABENOW. Well, thank you very much, Mr. Chairman.

And I first start by agreeing with the chairman that this is a very important, thoughtful discussion, and there are differences in approaches that are legitimate and I think are very important to talk about.

I also want to stress, as we look at long term, one of the frustrating parts of being around here for a while, coming in 2001, in this committee. At that time, we were talking about the largest surpluses in history of the country. And being in the House when we balanced the budget, I thought we were dealing with that. And we did balance the budget, and we did put in place the largest surpluses in the history of the country and debated that—what do we do with that?

Unfortunately, I believe the wrong structure was put in place. And as my mother would say, proof is in the pudding. We are now in the largest deficit in the history of the country. If we had listened to our chairman at the time in looking at the possibility on what do we do with the surpluses, he had—our current chairman had recommended a third for strategic tax cuts to grow the economy, a third for strategic investments and innovation in education and so on, and a third to pre-pay down the liability of Social Security.

Looking back on that now, as before, I think that would have been a pretty good plan to put us on a solid footing. But we are where we are. And so, now we have a hole, and we have to once again dig out of a very, very big hole.

I also want to agree with the ranking member and the chairman on infrastructure spending. We tried to do that. As the chairman indicated, he was advocating for much more. In all honesty, Mr. Chairman, I think it is important to say we didn't get the bipartisan support, or we would have done it.

Because I remember school construction and water and sewer and roads. We are at a point in our country where we need to give the country a facelift. You know, all of us baby boomers may feel the same. So we tried, and we will try again to be able to do that.

When we look at this—and I have a couple of specific questions for you. Very much appreciate your comments. But I do want to make two other points. We have to deal with long-term debt. In my judgment, we will never be able to deal with that with more than 15 million people out of work, which is why we started with jobs.

You have to start with jobs so that people are contributing, buying things, paying their taxes, or we will never get out of debt if people aren't working. And so, I believe jobs in the short run and moving forward has to be a huge part of that.

And with all respect to colleagues who feel differently, we have had a set of tax strategies in place for 10 years, and the argument about extending the top rates, I guess my question is where are the jobs? People in Michigan have lost 1 million jobs. If that had worked as an incentive, I would have been very happy—very, very happy. And, but we didn't see the jobs from that strategy.

So that brings us to now, and I want to thank you. I have a big smile on my face about Cash for Clunkers. I appreciate the comments on that. The coming together on timing was more luck, but strategically really was the right program at the right time. And I agree with you that I wish we could have made it longer. But I am appreciative of your comments about the fact that this did come at the right time.

It got people into showrooms. It gave them an opportunity to put some money in their pocket on the demand side and go look at vehicles. And they cleared out showrooms, and we put second shifts on in plants. So caring about demand is important, not just supply.

Question on manufacturing. A lot of what we did in the Recovery Act was focus on manufacturing for the first time in a long time. The 30 percent advanced manufacturing tax credit for new equipment and vehicles, for clean energy, the battery dollars, which have created many, many new opportunities for us in Michigan, are going to take us from 2 percent of the world's advanced battery manufacturing to 40 percent of the world's battery manufacturing in the next 5 years.

I wonder if you might speak about building on those kind of things. We have seen manufacturing numbers going up, not as fast as I would like, but certainly going in the right direction. And what role do you think manufacturing will play in recovery? What more should we be doing?

I am wondering, Dr. Blinder, if you would like to? And then Dr. Zandi and Dr. Taylor.

Dr. BLINDER. Sure. Manufacturing is pretty much—through housing is another contestant—the most cyclical aspect of the economy. So when we have a slump, manufacturing gets hit worse. Usually when we have a recovery, manufacturing is going to go up faster than GDP. I think that is happening now.

Second, however, and I hate to say this to the Senator from Michigan, but there has been for 50 years about now, and it will continue, a secular decline in the share of employment that is in manufacturing.

Senator STABENOW. Right.

Dr. BLINDER. And we should not expect that to change. What is in that manufacturing bucket has changed dramatically over 50 years, and I want to come back to that in my third point. But I think we have to accept it as more or less a fact of life that the share of employment in manufacturing is on a secular decline.

It has to do with consumer taste. It has to do with productivity. It has to do with a lot of things. The only point I want to make is that it is happening in every single advanced country in the world. We are just ahead of the pack. France, Britain, Germany—they are all following us with a lag. Theirs are declining also, and we are just ahead of them.

Third, however, there are some things we can do, and this has to do with what is inside the bucket. Ironically, I think one of the best things we could do to spur more manufacturing in the U.S., and this bears on the long-run deficit also, is to enact now a carbon tax or some variant on that that would start at essentially zero and rise on a predictable schedule, that would get American businesses focused on the kind of innovation which leads to production that they are capable of, if they have the incentive.

If people knew that fossil fuels were going to be vastly more expensive 10 years from now than they are now, American business would get to work right away in developing energy-saving technologies. We have seen this in the past. We have seen what American industry is capable of in terms of innovativeness.

And I don't believe any of these doomsday scenarios that we have lost the edge or anything like that. But you need to give than the incentives, and I think, ironically, even though it is a tax increase for the future and not for the present, I think that is one of the best things that we could do to spur manufacturing activity in the U.S.

Senator STABENOW. Thank you.

Dr. ZANDI. I rarely disagree with Alan. In fact, I can't even remember the last time I disagreed, but with regard to the prospects for the Nation's manufacturing base, I take a very different perspective. My view is that if you are a manufacturer and you survived what we have been through, you are mettle tested. You have a market niche. You are very cost competitive. Your prospects are incredibly bright.

And I think manufacturing has to be key, a key source of growth in our economy going forward. It is key to good, solid, high-paying jobs in parts of the country that we have got, for goodness sakes, a lot of unemployed workers that can't move because they are under water on their homes. So we need manufacturing to come back, and I think we are poised for very good, solid growth.

A different kind of manufacturing than we have done in the past—aircraft, aerospace, electronics, battery technology, machine tools, sophisticated instrumentation, construction equipment. I mean, we do a lot of things very well, and we are going to do them very competitively going forward.

Now there are a few things that could help. In the very near term, I think the President's proposal for accelerated depreciation benefits in 2011, that is a darned good idea. For 2011, that is going to juice up investment spending. It doesn't cost taxpayers very much because of the way the tax liabilities are distributed, and we are going to get a real boost to business investment, which helps long-run productivity growth and a growth in our living standards. And for goodness sakes, that is key to manufacturing. So I would be very supportive of that.

Second, another important policy effort where you have less control but we have some influence, it is very important for the Chinese to continue to allow their currency to revalue. They are on a path. My sense is they go 3, 5 percent on the currency, let it revalue every year.

Hopefully, 5, 6 years down the road they are fairly valued against the U.S. currency. Then U.S. manufacturers are going to be in a much better place competitively. But we need to continue to convince and educate the Chinese that this is the appropriate policy response not only for us and the global economy, but for their own economy it makes perfect sense.

And finally, third, fitting right in with infrastructure, you know, infrastructure I think is the best way to get persistent unemployment rates down, and it can be self financed. We have got lots of private capital. I get calls from hedge funds every day saying can we figure out a way—we want to invest in the Nation's infrastructure. We want to partner with Government. If Government can give us some catastrophic backstop, then we are in. And we are going to provide capital, and we can do this. And it is going to create jobs in those communities that are trapped right now.

And that is—when you build infrastructure, you are driving manufacturing activity, right? So I think that would be a very effective way of promoting long-term growth maybe. My view is manufacturing, as Alan has said, for the last—sorry, I am on a soapbox for a second, but I will get off—last 25 or 50 years, but I think its prospects for the next quarter century are very bright.

Senator STABENOW. Thank you.

I know we are out of time. I didn't know if Mr. Taylor wanted to comment or not. But, Mr. Chairman, I know I am out of time. So thank you.

The CHAIRMAN. We will go to Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman.

I do have to go to the floor. So I just have a few minutes. I will cut it short.

One of the things you discussed was instability arising now from uncertainty about tax rates, which could be fixed, should be fixed, and there is no reason that instability stays out there. But the President apparently is not willing to step up and make that plain statement.

In addition, we have the announcement that Larry Summers is leaving, following Christina Romer and Peter Orszag, the key team. And if this was a change because we have a new plan for the economy, perhaps that could be a positive. But in fact, it leaves us only with more uncertainty. It is not a healthy thing that is occurring.

And Dr. Blinder and Dr. Zandi, you talk about infrastructure, and Senator Conrad said he fought for more infrastructure in the bill. That was one of my biggest criticisms of it. It was sold as an infrastructure bill. The President and the Democratic leadership said this was for roads and bridges, we are going to fix our crumbling infrastructure, and only 3 percent or so of that money went to that.

And it didn't create jobs, unfortunately. I want to ask about that. But one thing about infrastructure. You have got the bridge. You have got the road that helps make the economy a little more productive at least, maybe for generations to come.

During the debate about the stimulus package, I remember reading on the floor from a Wall Street Journal article by Gary Becker, the Nobel Prize Laureate, and Kevin Murphy, and they posed the question, "How much will the stimulus package moving in Congress really stimulate the economy?" Now that was a good question to ask. And their conclusion was not much.

And it appears that they were proven correct. He says, quote—and this was in February 10, 2009. "In fact, much of the proposed spending would be in sectors and on programs where the Government would mainly have to draw resources away from other uses." He notes that, "Our conclusion is that the stimulus to short-term GDP will not be zero."

For heaven sakes, it couldn't be zero with that much money getting spent. "And will be positive, but the stimulus is likely to be modest in magnitude. Some economists have assumed that every $1 billion spent by the Government through the stimulus package would raise short-term GDP by $1.5 billion, or in economics jargon, a multiplier of 1.5. That seems too optimistic, given the nature of the spending programs being proposed. We believe a multiplier well below 1 seems much more likely."

Mr. Taylor, do you think that Professor Becker and Murphy were correct in their prediction?

Dr. TAYLOR. Basically, yes. My empirical research, simulations of models, finds that for this particular package, multiplier was less than 1—0.7, sort of a round number we found, to some extent. But in addition, those multipliers, so to speak, refer to purchases of infrastructure or goods and services. And, in fact, as you have pointed out, that has been very small. So, on top of the fact that the multiplier is smaller than some people argued, the thing that is being multiplied was quite small.

So, for those two reasons, I think that the conclusion of Becker and Murphy is basically correct. It certainly coincides with what I have been finding.

Senator SESSIONS. Well, one of the concerns I had, in retrospect, over what happened in the early Bush years and Alan Greenspan's leadership, was that we had surpluses, and they seemed to think that we could carry more debt. And even some were saying deficits don't matter. Do you remember that, Senator Conrad? I remember Alan Greenspan saying, "Well, I felt that we could carry some more debt."

But they didn't understand the politics of it, the economists. Once we lost the high ground of defending balanced budgets, it just roared out of control. The spending took over in ways that now jeopardize us.

Dr. Taylor, would you say that with regard to Professor Blinder's comment that we can't stand fiscal restraint right now that that does have some cost, in terms of creating more debt. Also, does it not create instability and concern in the financial markets when they don't see Congress commencing any fiscal restraint, and can we continue to just put off the day that we start showing restraint?

Dr. TAYLOR. I believe that it would be best to start right away, start when you announce the program. It doesn't have to be draconian, although quite frankly, if you look at my numbers, 18.2 percent of GDP in 1980, 24 percent now. It looks like we have capabilities of doing something.

But I think that, basically, it is important to start at the same time, not to put it off for a couple of years. Again, it doesn't have to be draconian. It can basically start making progress now, and that is where the credibility will come from. It is so easy to promise we are going to do something next year or the following year. It is hard to get started now, and that is where the credibility will come from.

So I strongly view that that is a positive for the economy. The reduction of uncertainty, the demonstration that our Government is dealing with these problems I think would be very beneficial and would help us get out of this really unfortunate situation of high unemployment and very low growth.

Senator SESSIONS. Well, as one constituent told me in Evergreen, "As my granddaddy said, you can't borrow your way out of debt." And I believe the old verities, if applied with minimal "masters of the universe" influence with the marketplace—no disrespect intended—by the people who think we can do this and we can do that, and we can stimulate this and we can reduce that, and allow the strength of the American economy to surge would be the best approach for us. And we need some firmer leadership than we have had, in my opinion.

The CHAIRMAN. Thank you, Senator Sessions.

Senator Begich?

Senator BEGICH. Thank you, Mr. Chairman.

Let me first ask a very simple question. Hopefully, a simple answer.

Compared to January 1909 to where we are today, is the economy better off?

Dr. BLINDER. Vastly.

Dr. ZANDI. Measurably better.

Dr. TAYLOR. January 1909, the unemployment rate was lower——

Senator BEGICH. That is not what I asked you. I don't want to get into the unemployment rate. I want to ask you the general, overall question. Is the economy better today than it was in 1909? It is a very simple question. It is a yes or a no.

Dr. TAYLOR. Well, I think—the dimensions I am looking at, we are in worse shape. The unemployment rate is higher. Our growth rate is better. It is 1.6, rather then I guess it was about minus 6 at that point. That is definitely an improvement.

But it is very disappointing, Senator. I mean, this is 3 years—the crisis really started in August 2007. So in terms of what is better and what is worse, I think it is not in a good shape, and we need to think about fixing it.

Senator BEGICH. So I want to make sure I got your commentary. I am not disagreeing that there is more work to be done. That is a question over here. In 1909 to where we are today, are you telling me the economy is worse off?

That is the—it is not a complicated question.

Dr. TAYLOR. Growth is higher, which is good.

Senator BEGICH. Now see——

Dr. TAYLOR. Unemployment is higher, which is bad.

Senator BEGICH. OK. I am not going to get an answer from you. I can tell that because—now maybe I am missing something. Now, and I know I have these discussions in budget, and I appreciate, Mr. Chairman, your graciousness to allow me on this committee in kind of midstream. But I will be very blunt with you, all three of you.

First off, I agree with I think there is a lot of issues that Senator Gregg and I agree on. The ranking member, Senator Sessions, and I are cosponsors of some budget bills, some deficit control bills. But I am one of the few in this whole U.S. Senate that is a small business person, that has had to go scrape capital together, that actually had to go talk to a bank and understand what it is like. Had to fill out a 1099, to actually decide what is going to get an employee to work for me and how to grow the customer.

I appreciate your comment on the HIRE Act. For a small business person, that doesn't incentivize me to hire someone. There is only one thing that incentivizes me is my business increasing. And I will be very blunt with you, people who—and I hear this, and it is the political jawboning that goes on in this place. They always try and figure out what side they need to be on.

The economy is better. The amount of cash that corporations have today than they had before is greater. Their stock prices are better today than they were in 1909. When people get their third quarter retirement, 401(k), education statements, which they will get in a few weeks, it is like the best direct mail program ever because they are going to see that their portfolios are better than they were in 1909.

Now what I hear a lot, and I will say also on the recovery, I also like the way creation of history happens around here. I was in those negotiations in February on that stimulus bill, and all due respect to my colleagues on the other side, if I now know all these people who wanted infrastructure because I am a guy—I am a mayor, a former mayor. We build stuff. That is what we love to do. Because when we build stuff, it changes the economy immediately.

Now that there is all this new support for infrastructure, that stimulus bill should have had $800 billion for infrastructure. But that is not the case because the other side had all this about tax cuts and all this other stuff, and that amount of infrastructure dollars shrunk and shrunk. But it is interesting to find out today that so many people supported it, I just missed them back last February. Because that is just a fact, I agree. I think everyone agrees infrastructure investment is a great way to stimulate an economy.

My problem is of how we distributed it. I am a believer that you have got to put it out on the local end. You want it to hit the streets to people who actually can get the jobs done. I am biased. I am a former mayor. Mayors know how to do it. School boards how to do it.

So I just—you know, when I hear some of this jawboning that goes on in these committee meetings and some of the re-creation of history, it is amazing to me. If this was the case, we would have had 100 votes for an infrastructure bill at $800 billion.

And I know the Democrats worked very hard on it. I sat in a meeting about education construction dollars, and what we heard from the other side is, well, we have never really done that. We don't do that.

My view was a double. If we put money in a school budget for school construction, first off, it gets distributed down at a local level, which means actually you would build something. Second, you would offset the property taxes that are usually paying for those, and therefore, you will have another opportunity to hit homeowners in a positive way.

Also, a property tax makes a difference. If you can lower property taxes, it makes more properties more financeable because that is a piece of the equation for a mortgage. It seems so simple, but this place is not a simple place, as we all learn.

But I will just say again that the record to me is so clear. Are we a fragile economy? Yes, we are. Is there more work to be done? We can debate that. How that will occur is the work that we are all here to try to do. And in my view, I just sit here patiently listening, and I just get frustrated when I see history re-created based on the needs of a political cycle rather than what is right for this country.

The second thing is—and I know these two words. If you ask any pollster, they say don't mention "TARP." Don't mention "stimulus." But the fact is, and I don't think anyone would disagree, TARP, in its own way, painfully worked. I didn't like it. I campaigned against it.

But when we look back and see the repayment schedules that has occurred and the infusion that occurred to create certainty to the financial institutions, it was a huge plus. It may not have been the amount of dollars. But I think you mentioned earlier about once they knew kind of what was going on, certainty is the name of the game in business—certainty. Not a few dollars on the table to build something, but certainty.

If they knew there was a long-term infrastructure plan, they would know certainty. They knew there was a tax policy, not one that is going to be extended for a year or 6 months or—people don't plan multibillion dollar businesses on a thing Congress does for 6 months. That is the most ridiculous thinking I have ever seen. It is based on certainty. And so, I got on a little rant because I got a little frustrated when I hear people re-create history and then repackage it in a way that makes it sound so bad.

I will tell you I have never seen more panic sitting in a political office in January 1909 when I came here and was sworn in. More panic in members that have been around here for ages because this economy was over the cliff and hanging on by just a thread. So I feel like we have moved a little bit further.

Now saying that, I have got two quick questions. I am sorry I went on a rant. I just get a little frustrated when people want to re-create things for political purposes. Two things. Do you believe my statement that I made on businesses want certainty to determine the long- term investments they make?

And this should be simple. I try to keep my questions simple. I know, as economists, you want to give long answers, and I recognize that. But can you answer that? And then it leads to the next question.

Dr. BLINDER. Can I just make a——

[Laughter.]

Dr. BLINDER. This is going to sound slightly pedagogical. There is no such thing as certainty in business. You have been in business. I am in a business myself.

Senator BEGICH. That is fair. That is a fair statement.

Dr. BLINDER. But I think what you mean is reduction of uncertainty.

Senator BEGICH. Yes.

Dr. BLINDER. Especially the uncertainty about the rules of the game, and absolutely.

Senator BEGICH. Yes. That is a better way to phrase it. Yes. That is the question then.

Dr. ZANDI. You should know I am not just an egghead. I started my own company——

Senator BEGICH. So you know what it is like.

Dr. ZANDI [continuing]. In 1990, me and my brother. And we sold it 15 years later. So I know exactly what you are talking about. And yes, you need to know what the rules of the game are. Until you do—and it is down to the crossed T and the dotted I. Until you do, you are not going to make a big investment decision or a hiring decision.

Dr. TAYLOR. I agree 100 percent. Certainty is important, and predictability of policy——

Senator BEGICH. Microphone? Dr. Taylor?

Dr. TAYLOR. I agree 100 percent. Certainty is a great benefit to businesses, and I think that the greater policy can be predictable, the more certain the environment will be for businesses.

Senator BEGICH. Excellent. Let me, if I, Mr. Chairman, could just ask one quick question, and then I will stop. And I appreciate——

The CHAIRMAN. No, go ahead.

Senator BEGICH. I thank you for the additional time here.

Thank you for all agreeing on that.

Now, and I have pitched this before in this committee, you know, we are going to contemplate this tax policy, and I could argue that some people think there is no leadership on this issue. I don't know. I have heard the President talk about 98 percent of the people getting a tax reduction. Some are fighting over the last 2 percent. I mean, in politics, if you get 98 percent on anything, that is a pretty good deal.

But leaving that aside, I am a believer that, again, certainty is the name of the game. I have saddled up to the Wyden-Gregg tax policy legislation, which takes corporate rates down to a flat of 24 percent, taking it from the second highest in the world down to about midstream, compressing the six individual rates down to three—35, 25, 15. It gets rid of a lot of loopholes, simplifies it, deals with capital gains, reinvestment, really focused on small business and how to make sure those dollars.

I recognize we have to debate the Bush tax cuts because that is what is in front of us, but isn't it wiser for us to really think about a longer-term reform? There has not been really tax reform for so long that the uncertainty in business is they just don't know what we are doing. Are we going to have an energy tax credit? Are we going to have a capital gains reduction? Are we going to have what?

Isn't that the better approach if we are serious about reviving the economy, just have some rules of the game, at least on tax policy? I am putting infrastructure aside because that is a different ballgame. Who wants to respond to that?

Dr. TAYLOR. Very briefly, your points about the corporate rate and a need for tax reform are very well taken. I think in this environment, though, Senator, for certainty, which is really what you are emphasizing, just the certainty that the tax system will not change for a while, just leave it alone for a while, that will create certainty. We know what the tax rates are. Leave them where they are.

I think in this situation where the very credit worthiness of the United States is going to be at stake, maybe postpone these important things and just create stability right now. That is what I would argue for.

Dr. BLINDER. I am actually quite sympathetic to that. I have been a longtime advocate—forever, as far as I can remember—of tax reform and especially tax simplification. But I must say, given all the tumult of recent years, I am pretty sympathetic to what John just said, that we sort of can't do everything at once. You can't throw everything into the hopper at once.

For example, doing something about the long-run budget deficit may right now be more important than tax reform. That is something I never thought I would hear myself saying, but I think there is validity to that right now.

Dr. ZANDI. I would just say I would think to address our long-term fiscal problems we are going to need tax reform. I don't know how we are going to be able to do it in a credible way unless that reform includes spending restraint and some substantive changes to the tax code.

And I think part of that would be consistent with what you are saying. I do think it would be prudent to lower the corporate tax rate. I do think that that would be an appropriate way to move. Of course, you have to put that into the context of the long-term fiscal situation.

Senator BEGICH. Correct. Let me end there.

Mr. Chairman, thank you for letting me extend further than I should have, but I thought it was some interesting dialog.

The CHAIRMAN. That was very good.

Senator BEGICH. Thank you very much, Mr. Chairman.

The CHAIRMAN. That was very good. I am glad that you did it.

Let me just say with respect to answering your question on whether or not we are better off now than 2009, I don't think there is any question. Just on the facts, the economy contracted about 5 percent in the first quarter of 1909. We have positive economic right now, although not as strong as we would like. But it is positive 1.6 percent.

On the employment front, in January 1909, we were losing 800,000 private sector jobs a month. Now we are in positive territory. Jobs are being created, again, though not at the rate we would like.

Look to the markets. Look where the stock market was in January of 2009. Look where it is today. It has dramatically improved.

Now, what hasn't improved is our long-term fiscal outlook, and that does require our attention. I personally am in the camp of Dr. Blinder. I would not do something draconian in terms of fiscal discipline at this moment.

I would put in place the plan that brings us to a debt that would be lower as a share of our economy than the debt we have now because I think we are at a very—a tipping point, if you will, at a debt, gross debt of 90 percent of GDP. If we look at economic history, that has been a tipping point. We had testimony to that effect before the fiscal commission.

And clearly, it is going to take attention on both the spending and the revenue side. On the spending side, spending is the highest it has been as a share of GDP in 60 years. Revenue is the lowest it has been as a share of GDP in 60 years.

So I think it is going to take a response on both sides, and I personally believe tax reform, fundamental tax reform has got to be part of it. I think Gregg-Wyden is a very good beginning. I can tell you it is getting a great deal of attention on the commission. No decisions have been made, but I think it is a very thoughtful beginning.

And you know, we have got a tax system that was designed when we didn't have to worry about the competitive position of the United States. We were so dominant when this tax system was constructed we simply did not have to worry about the competitive position of the United States. We do now. And we have got to write a tax system that helps us compete as effectively as we can as a country.

It would be very foolish not to take this opportunity to work on that but without changing the tax code in the next several years, but put in place the reforms that I think most of us know really are needed.

With that, I want to thank this panel. Senator Gregg said to me as he left, "Boy, that is an all-star panel." And it is. These are three of America's very best. And we owe a deep debt of gratitude to not only testimony here today, but much more than that—a career of contributing to the dialog in this country on very complex issues.

Three of America's very best—Alan Blinder, Dr. Mark Zandi, and Dr. Taylor. Thank you so much for being here. We appreciate it.

[Whereupon, at 11:48 a.m., the hearing was adjourned.]

QUESTIONS FOR THE RECORD

Alan S. Blinder September 2010

ANSWER TO SEN. NELSON

Almost three years ago, I began advocating (what then seemed like) a radical approach to limiting what seemed certain to be a tsunami of foreclosures: reviving the Depression-era Home Owners Loan Corporation (see Alan S. Blinder, "From the New Deal, a Way Out of a Mess," The New York Times, February 24, 2008). The core of the idea was to refinance mortgages in ways that write down principal. I thought at the time that a new HOLC might cost $200-$300 billion up front, most of which would subsequently be paid back by homeowners. While I continue to think that would have been the right approach in 2008, by 2011 it may be too late. The tsunami has indeed happened; we have not avoided it. It now appears that the *worst* of the foreclosure problem may be behind us, not in front of us—though the problem is far from over. And given the set-up time and the sour public reception of TARP, putting several hundred billion dollars of taxpayer money at risk now seems beyond the pale. That said, I applaud the administration's recent efforts to turn its foreclosure mitigation efforts more in the direction of principal reduction.

ANSWERS TO SEN. SESSIONS

My view on the Bush tax cuts is that the so-called upper-bracket cuts should expire on schedule. It is true that doing so would reduce spending a bit, but not that much. (The amount of money involved is not large--in the range of ¼% of GDP--and much (not all) of it goes to very wealthy households, whose spending would not be much affected.) And it is easy to find other tax cuts that would have a vastly larger impact on jobs. One example is the new jobs tax credit that I mentioned in my testimony.

What level of taxation is appropriate? That's a very hard question because it depends, ultimately, on how large a government you want/need to finance. It's not they we *want any* taxes at all; it's that we need tax revenue to pay the bills. My judgment is that modern Americans (as opposed to the Americans of 1810 or 1910) want a federal government that is heading for something around 24%-25% of GDP—the increase being mainly because of higher health-care expenditures. Working backwards, if that's right, we should be shooting for a federal budget deficit of not more than about 3% of GDP, which implies a need for 21-22% of GDP in federal taxes. This level of taxation, by the way, would leave us a long, long way from Sweden.

Regarding stimulus, the chart from Dr. Taylor's testimony to which you refer does not purport to assess "the effectiveness of stimulus". It shows, instead, something much more limited and objective: that the quarter-by-quarter fluctuations in what the Commerce Department categorizes as (nondefense) "government purchases of goods and services" have been quite small. But these purchases constitute only a small corner of federal spending. And, as Taylor's chart shows, they have been a very small corner of the fiscal response to the recession. Most of the ARRA was tax cuts and grants-in-aid to state and local governments.

Answers from Dr. Mark Zandi

Senator Session's Question: Do you believe that having a deficit of zero is a worthy goal, and do you think that modest multi-year spending caps like we had in the 1990s is a good first step to getting there?

Yes, achieving a budget deficit of zero is a worthy long-term goal. To achieve this will require both government spending restraint and tax increases. Based on other historical experiences in this country and overseas, it is desirable to focus more on the spending restraint than on the tax increases; fiscal austerity through spending restraint results in better economic outcomes than through tax increases. Multi-year spending caps could be helpful in achieving this goal. More fundamentally, however, to achieve a zero budget deficit will require reform of the Social Security and Medicare systems. Without this reform, the growth in these programs, particularly Medicare, will be very strong for a multitude of reasons and make it all but impossible to achieve the laudable goal of a zero budget deficit.

Senator Session's Question: Do you believe that raising taxes on small businesses even in 2012 is a good idea, given that business decisions are made well in advance?

I don't believe taxes should rise for anyone in 2011 when the economic recovery is so fragile. I do think it appropriate to allow the tax rates for those in the top tax brackets to rise back to where they were in the late 1990s beginning in 2012 when the economic expansion should be on a sounder footing. The increased tax revenue that this will generate will be very important to addressing our long-term fiscal problems and achieving the worthy goal of a zero budget deficit that you articulated in your first question. When the economy is performing well in 2012, the small increase in tax rates will not materially impact investment and hiring decisions by the very successful small businesses that will pay the higher rate. I do think it is important for policymakers to quickly determine precisely what the tax code will be next year and for years to come in order to provide this certainty to small business owners and everyone else so that they can plan well in advance.

Senator Session's Question: What level of taxation do you think is appropriate? At what level should the budget achieve balance? Do you think it is better for economic growth to have a high-tax, high-spending economy like Sweden, or a low-tax, low spending economy.

The average federal government revenue to GDP ratio since World War II of about 18% provides a reasonably good benchmark for the appropriate level of taxation. Despite the ups and downs in the U.S. economy since World War II, it has performed very well. An 18% revenue-to-GDP ratio shouldn't be a policy rule but a policy guide in part because the ratio or any other measure can be impacted by forces that are not fundamental or long-lasting. For example, the very high revenue-to-GDP ratio in the late 1990s was due in part to the technology bubble and the very low current revenue-to-GDP ratio is due in part to the negative fallout from the Great Recession. Moreover, it may be appropriate for the government to run a higher revenue-to-GDP ratio for a period to help pay for national defense and security needs and/or the costs of large natural disasters. The ratio should also be at times higher or lower depending on the demographic composition of the population; for example, the ratio would be higher when there is a larger share of very young and very old in the population that require more government services.

Senator Session's Question: What do you think of this chart? (referring to the bottom chart on page 3 of Dr. Taylor's testimony). Does it disprove the effectiveness of stimulus?

No. The chart simply documents that a very small share of the stimulus (including the Bush tax rebate checks in 2008, the 2009 Recovery Act, and other stimulus since then) has included government purchases. Of the $748 billion in stimulus provided to the economy through July 2009, at most $129 billion is government purchases, including infrastructure spending and monies provided to state and local governments to help pay for the salaries of teachers, police, firefighters and similar jobs. That is only 17% of the stimulus monies has gone for government purchases. The bulk of the stimulus has been temporary tax cuts to households and businesses ($362 billion), and transfers to unemployed workers, senior citizens, and the poor ($257 billion).

You mention the IMF model as showing that stimulus in the form of government spending as being ineffective. The IMF has done some recent research, which includes the use of the IMF model and six other models, that comes to a very different conclusion. On page 23 of the March 2010 IMF study Effects of Fiscal Stimulus in Structural Models, the authors conclude:

> *First, there is a robust finding across all models that fiscal policy can have sizeable output multipliers, particularly for spending and targeted transfers. Second, the effectiveness of fiscal policy will be largest in circumstances in which monetary policy supports fiscal policy by accommodating stimulative fiscal actions through holding interest rates constant for some period of time. Third, more persistent stimulus, if the additional stimulus is measured in years rather than decades, is even more effective if monetary policy remains accommodative. Fourth, permanent fiscal stimulus has significantly lower multipliers at the outset, and has negative output effects in the long run.*

Senator Session's Question: What do you think of the destructive effect of government borrowing on the economy?

Excess government borrowing driven by large persistent government budget deficits will in most times when the economy is operating near its potential be destructive to the economy. During these periods, strong government borrowing will crowd out productive private sector borrowing ultimately resulting in a less productive economy. However, these aren't most times and given the severity of the Great Recession, the economy is operating well below its potential. Moreover, the private sector continues to deleverage – households in particular who took on too much debt in the last decade are working hard to reduce their debt loads currently. Total net borrowing in the economy, including the federal government's record level of borrowing, is effectively zero. There is no crowding out. This is also evident with respect to interest rates, which are currently near record lows. Having said this, it is important that once the economy is expanding consistently again and private sector borrowing resumes, then the government must reduce its deficits and borrowing. Indeed, it would be very helpful if policymakers could quickly provide clear guidance how this will be accomplished.

Senator Nelson's Question: Please assess what could be done differently to drastically improve the state of our housing market, taking into account the prerogative of individual banks and state governments.

The most effective step policymakers could do to improve the housing market quickly is to facilitate more mortgage refinancings. Some 6 million homeowners appear to be very good candidates to take advantage of today's extremely low mortgage rates by refinancing. Yet, too many are being shut out of this opportunity to significantly reduce their monthly payments. The struggling economy is also missing out on a much-needed boost that would ensue if more homeowners suddenly had a little extra money to spend each month after making their house payments.

The reason is that lenders are withholding their best interest rates from potential refinancers whose credit ratings and home equity have eroded in the tough economy—even from borrowers who have kept current on their mortgages. Fannie Mae and Freddie Mac appear to be doing roughly the same thing as private lenders: charging higher refinancing rates for those whose credit scores and home values were undermined by the housing bust and Great Recession. Fannie and Freddie account for about half of all the mortgage loans outstanding.

With mortgage rates about as low as they have ever been, anyone paying more than 5.5% should be considering a refi. Applications for refinancings have risen strongly in recent weeks to levels last seen in the biggest refi boom on record nearly a decade ago, during the recession that followed technology bust. Yet, the current refi wave seems likely to fall well short of the previous boom, even though rates are much lower now. Conventional fixed mortgage rates are now well below 4.5%. A decade ago, they were closer to 7.5%, two decades ago nearly 10%, and three decades ago an almost-unimaginable 16%-plus.

Unfortunately, nearly everyone's home has fallen in value, and thus the equity in our homes—the difference between the home's value and the mortgage debt owed—has diminished or even gone negative. Some 14 million of the nation's nearly 50 million homeowners with first mortgages are now under water—that is, they owe more than their homes are worth. Lenders are wary of those with little or no home equity. With no "skin in the game," they are considered more likely to stop making their payments if something else goes wrong in their financial life.

And of course a lot has gone wrong, which has significantly lowered homeowners' credit scores. Lenders look closely at these scores, which are based on the borrower's payment history and current debt load, to determine the likelihood that the loan will be repaid. With nearly half of all Americans having endured a bout of unemployment or underemployment in recent years, lots of people have been struggling to make their credit card, auto and mortgage payments. Their credit scores have naturally suffered.

Lenders will charge a higher interest rate to refinance a borrower with reduced or negative equity and lower credit scores. The logic from the lenders' perspective, especially if they don't already own the mortgage, is that they are taking on more risk, so the homeowner should pay more in interest. Even if a lender owns the loan and will suffer if the homeowner defaults on the higher payments, they may still hesitate to let the homeowner refinance at a lower rate that will pay them less in interest if they think the odds of the homeowner defaulting are low enough.

The way to address this problem is to require Fannie and Freddie from charging higher rates for borrowers who are current on their payments, even if they have little or even negative equity in their homes or low credit scores. That way, more mortgages would get refinanced, fewer borrowers would default, more homeowners would have more money in their checkbooks, and the economy would receive a quick cash infusion.

With fewer defaults, even Fannie and Freddie—and by extension taxpayers—would benefit. Fannie and Freddie would receive less in interest, as would the other private investors in mortgage securities backed by the Fannie and Freddie loans being refinanced, but most global investors have been surprised that they haven't been refinanced out of more loans already.

OUTLOOK FOR THE ECONOMY AND FISCAL POLICY

TUESDAY, SEPTEMBER 28, 2010

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, DC.

The Committee met, pursuant to notice, at 10:01 a.m., in room SD–608, Dirksen Senate Office Building, Hon. Kent Conrad, Chairman of the Committee, presiding.

Present: Senators Conrad, Wyden, Nelson, Whitehouse, Warner, Gregg, Bunning, and Ensign.

Staff present: Mary Ann Naylor, Majority Staff Director; and Cheri Reidy, Minority Staff Director.

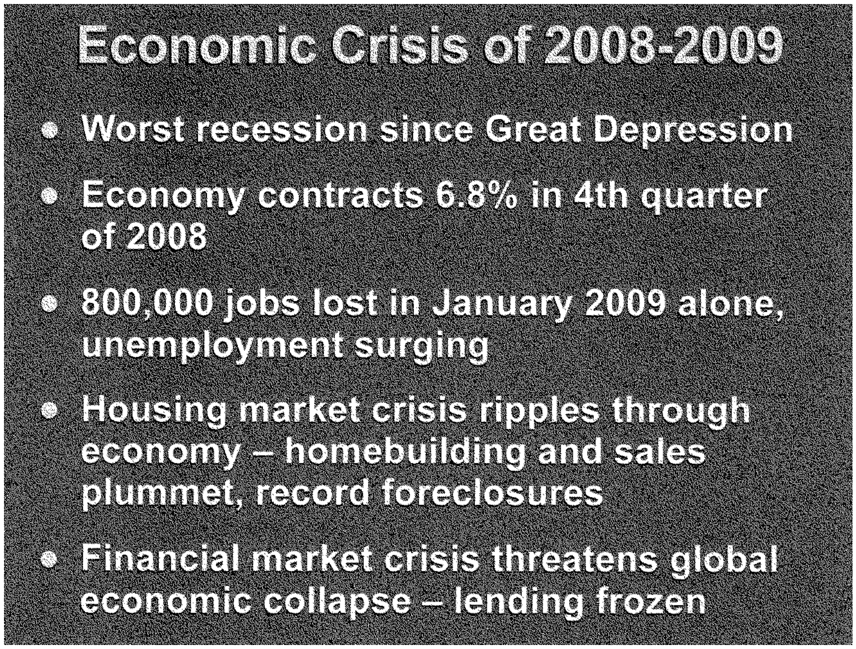
OPENING STATEMENT OF CHAIRMAN CONRAD

Chairman CONRAD. The hearing will come to order. I want to thank my colleagues and thank our witness for being here. Today's hearing will focus on the outlook for the economy and fiscal policy. Our witness today is CBO Director Doug Elmendorf.

Director Elmendorf, welcome back. We look forward to your testimony.

I would note that this is our third hearing on the economy in the last 2 months. We have heard from six outstanding economists so far. Director Elmendorf will make it seven.

Let me begin by providing an overview of our fiscal and budget outlook. I think it is critically important to remember the economic crisis we faced just a short time ago. By late 2008, we were in the midst of the worst recession since the Great Depression. The economy shrunk at a rate of 6.8 percent in the fourth quarter of 2008. Unemployment was surging, with 800,000 private sector jobs lost in January of 2009 alone. A housing crisis was rippling through the economy, with home building and home sales plummeting and record foreclosures. And we faced a financial market crisis that threatened to set off a global economic collapse.

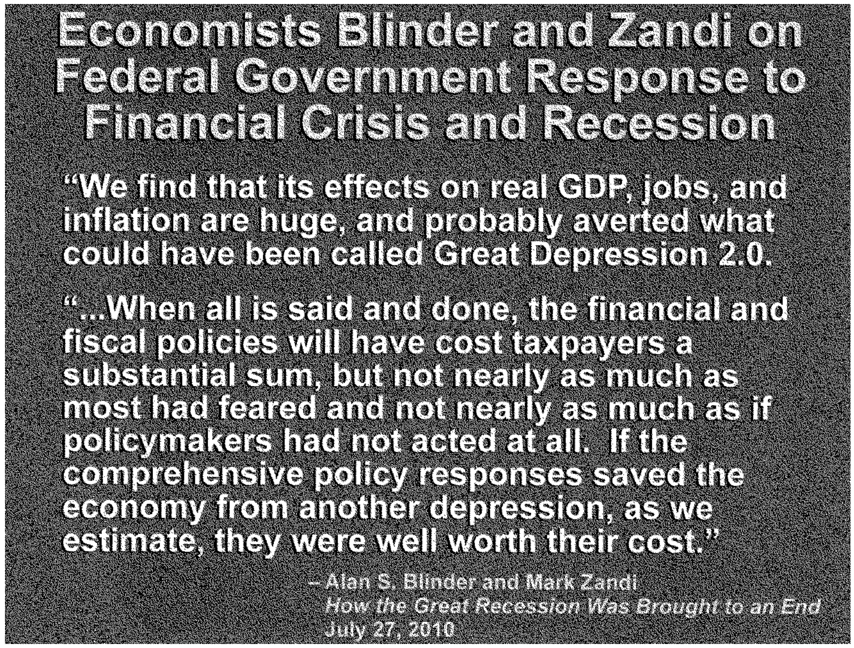


I will never forget being called to an emergency meeting in the Leader's office in the fall of 2008. I arrived at about 6 o'clock. There were the leaders of Congress, Republicans and Democrats, Senate and the House, the Chairman of the Federal Reserve, the Secretary of the Treasury in the previous administration, and they told us they were taking over AIG the next morning. They believed that if they did not, there would be a financial collapse.

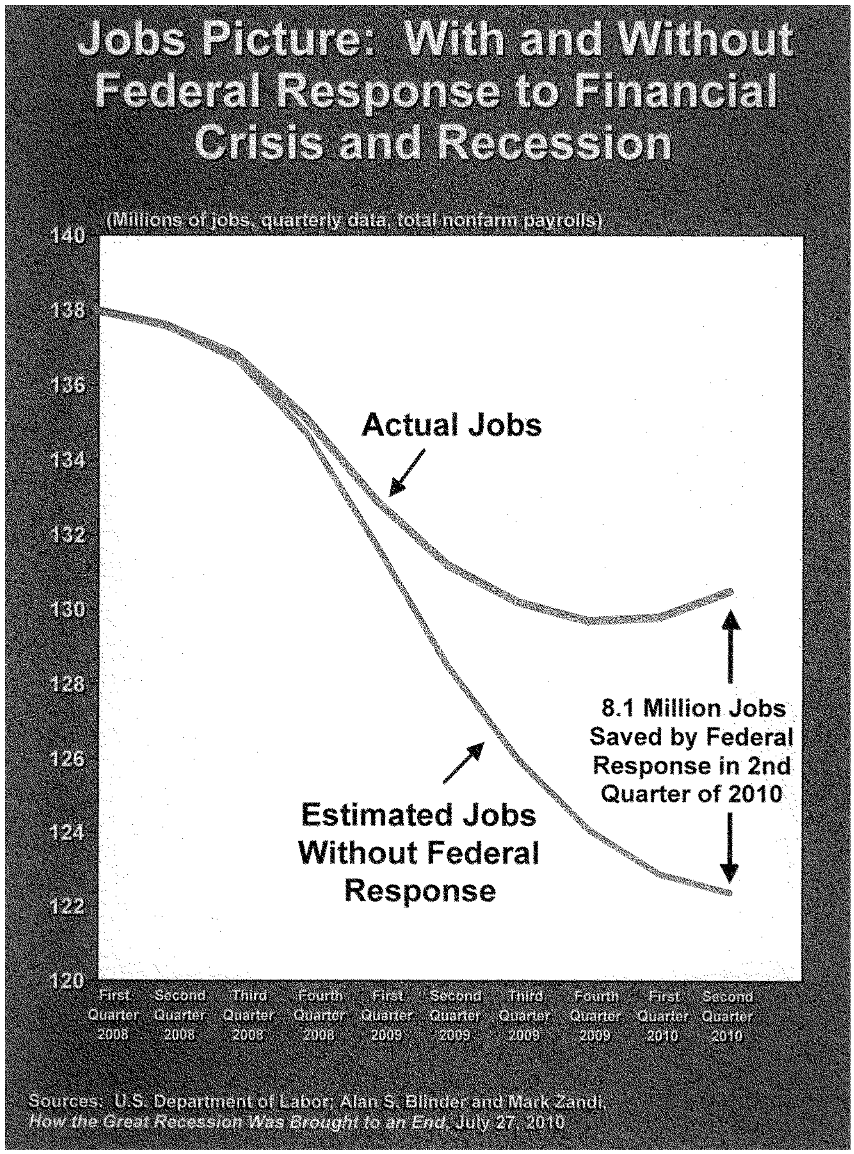
Those were very, very serious days. And the Federal response to the crisis I believe has successfully pulled the economy back from the brink. And this year we have begun to see a return to economic and job growth, although both are weaker than we would hope.

Two of our witnesses from last week's hearing, Dr. Blinder and Dr. Zandi, completed a study that measures the impact of the Federal response to the crisis. I would like to highlight their findings and then ask Dr. Elmendorf to comment in his testimony on whether CBO has found a similar impact and result.

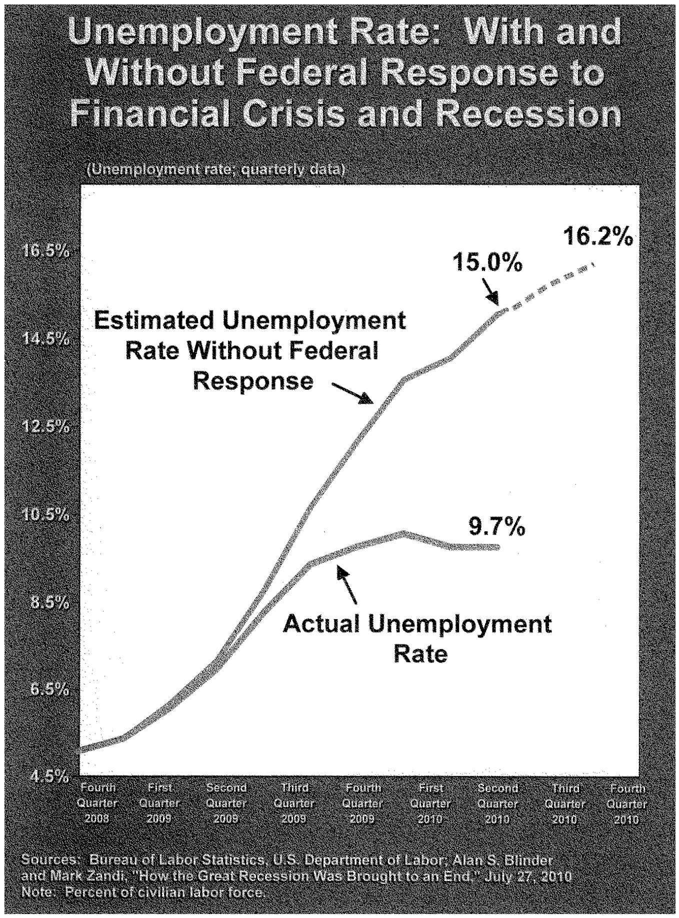
Dr. BLINDER AND DR. Zandi's report said, in part, and I quote, "We find that the Federal response effects on real GDP, jobs, and inflation are huge and probably averted what could have been called Great Depression II. When all is said and done, the financial and fiscal policies will have cost taxpayers a substantial sum, but not nearly as much as most had feared and not nearly as much as if policymakers had not acted at all. If the comprehensive policy responses saved the economy from another depression, as we estimate, they were well worth their cost."



This chart compares the jobs we have actually had in our economy recently with an estimate of the jobs we would have had without the Federal response. It shows that we would have had 8.1 million fewer jobs in the second quarter of 2010 if we had not had the Federal response.

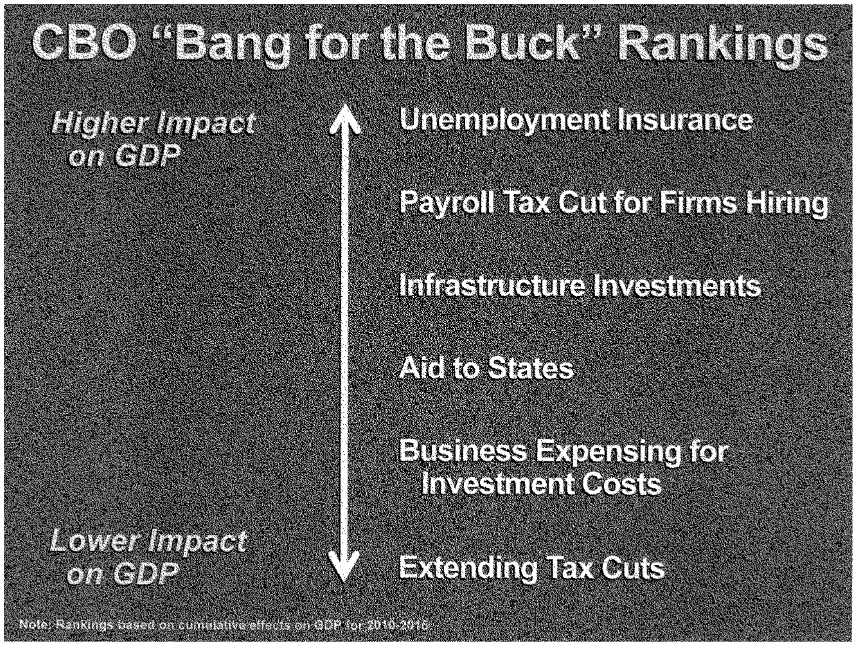


Let me go to the next chart. You see a similar picture with the unemployment rate. The actual unemployment rate on a quarterly basis is now hovering at about 9.7 percent. That is still far too high, and we must do more to create jobs and bring this rate down. But if we had not had the Federal response, the unemployment rate would now be 15 percent—again, this is according to the analysis by Dr. Blinder and Dr. Zandi—and would continue rising to 16.2 percent by the fourth quarter of 2010. So, clearly, the Federal response to the economic crisis has had and continues to have a significant positive impact on the economy.



But, clearly, we are not out of the woods. The economy remains unsteady and faces strong head winds. That is why in the near term I believe we need to focus on providing additional liquidity to boost demand and promote job creation. We cannot afford to repeat the mistake of the mid-1930's when recovery measures were pulled back too quickly, and the Great Depression was prolonged.

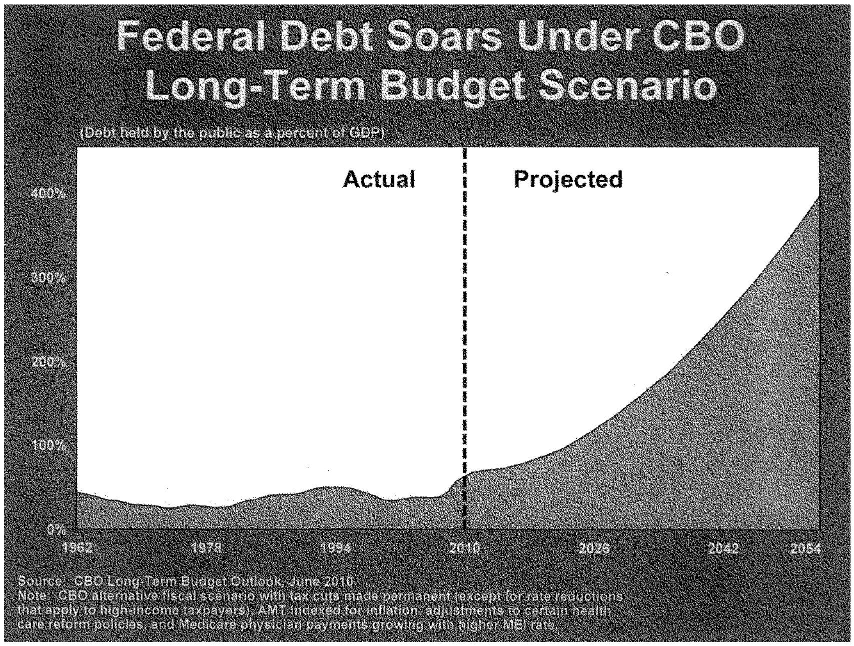
At my request, CBO has previously provided Congress with the ranking of the bang for the buck we get from various Federal policies designed to spur economic growth. This chart depicts some of the policy options ranked by CBO.



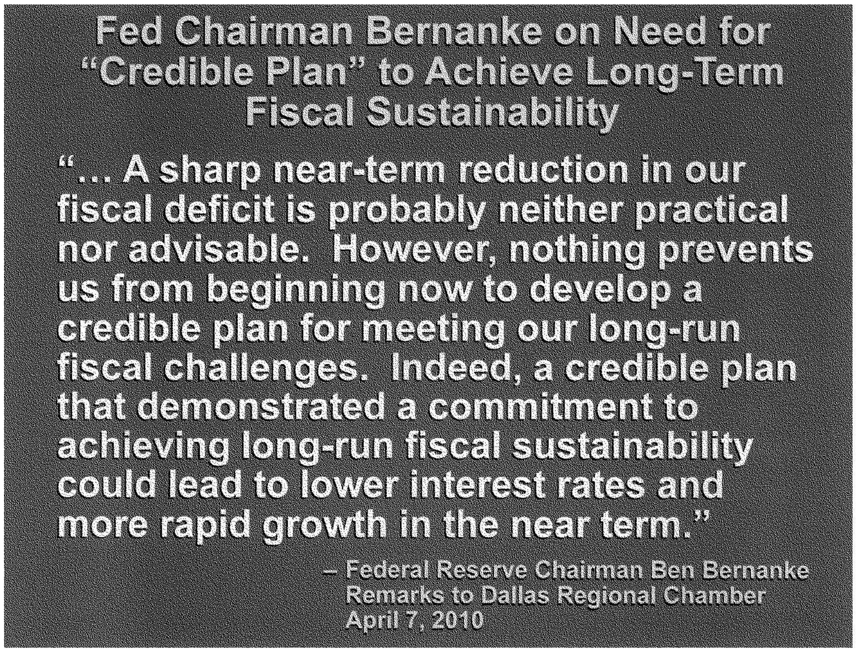
On the upper end of the scale, it shows that policies like extending unemployment insurance and providing payroll tax relief for firms hiring unemployed workers give you a higher impact on GDP for each dollar spent. Also at my request, CBO has now done further refinements of these rankings to help Congress as it considers options going forward. I look forward to hearing from Director Elmendorf about CBO's latest findings in this area.

In addition to the near-term economic challenge, we must also confront the looming long-term budget crisis. The retirement of the baby-boom generation, rising health care costs, and our outdated and inefficient tax system are projected to explode deficits and debt in the years ahead. I might say if we extend all the tax cuts permanently, that would have a profound effect on increasing deficits and debt as well.

According to CBO, Federal debt could rise to 400 percent of gross domestic product by 2054. That is 44 years from now. That is a completely unsustainable course. What we should be doing now is putting in place deficit reduction policies that will kick in after the economy has more fully recovered. By establishing and enacting these policies now, we will reassure the financial markets the United States is confronting its long-term fiscal imbalances.



Let me just conclude by what Chairman Bernanke has said earlier this year about the need for a credible plan to address our long-term fiscal challenges. He said, and I quote, “A sharp near-term reduction in our fiscal deficit is probably neither practical nor advisable. However, nothing prevents us from beginning now to develop a credible plan for meeting our long-term fiscal challenges. Indeed, a credible plan that demonstrated a commitment to achieve long-run fiscal sustainability could lead to lower interest rates and more rapid growth in the near term.”



I believe that. That is why I believe the work of the President's Fiscal Commission is so important. As members of that Commission, Senator Gregg and I can attest to the hard work being done by the Commission. I remain hopeful that we will come up with a bipartisan plan that puts the Nation back on track.

With that, I would turn to Senator Gregg for his observations, and then we will go to the witness for his testimony.

OPENING STATEMENT OF SENATOR GREGG

Senator GREGG. Thank you, Mr. Chairman, and I look forward to hearing from the Director on his view of where the economy is going. I would like to associate myself with the second half of your presentation, which is that I do not believe economic recovery will occur until we make it clear to the markets and to the American people that we are going to be serious about dealing with the debt of this country and the rising deficits and their impact on the markets, their impact on confidence.

I believe the American people have pretty much lost their confidence in their Government. They are seeing a Government which has grossly overexpanded, which has exploded in its size from 20 percent of GDP when this administration came into office and now to 24 percent of GDP, headed up to 26, 27 percent of GDP; a Government which has exploded not only in size of its spending but also in size of regulatory activity, to the point where it is very hard for small businesses to be able to do business because they are weighed down by this massive expansion in regulatory activity, especially from the health care bill, creating huge uncertainties in the future of small companies or small businesses as to whether or not it should expand.

That is coupled with the fact that we passed laws which have significantly retarded the availability of credit by being a misdirected effort to try to correct the very serious problems with our banking system, the financial reform being a specific act of transgression here in that it is a bill which has caused credit to contract and will cause credit to continue to contract, without doing anything substantial, at least significant in the area of addressing the underlying problems which drove the credit contraction, which were the real estate bubble and the excessive and inappropriate lending that was occurring in the marketplace. Instead of addressing those issues, it created, again, layers and layers of new regulatory activity, hundreds literally of new regulatory agency initiatives, including a brand-new agency called the Consumer Protection Agency, which is going to be headed up by an ad hoc individual who is not even going to appear before the Congress for confirmation. What a transgression of the constitutional process that is since this person will probably be one of the most powerful people in Washington with a stream of funding which has no, absolutely no accountability to the Congress because it comes from the Federal Reserve and, therefore, is not subject to annual appropriations, and a Director who it appears will also have no accountability to Congress because the Director will not even come to the Congress to be confirmed as the law requires. And that agency, I predict, will be an agency not for the purposes of protecting consumer credit, but for the purposes of pursuing a political agenda of social justice as defined by the leader of that agency.

So the American small business person is being inundated with a Government of excess spending, excess regulation, excess concern about the capacity to know what is going to happen in the future in the area of credit, and that is why the economy is not moving forward.

So if we want to get the economy moving forward, we should begin by putting in place financial systems in the Federal Government which will control the deficit and debt in the out-years and give people confidence that we will get that under control.

And we should begin the process of an orderly reorganization of our health care system that will make it function rather than become more bureaucratic. And we should take a look at our credit markets and see how we can make them function more efficiently and effectively in a responsible way, all of which we have not done.

So I would say that if we want to—you know, there is that old "Pogo" saying, the cartoon "Pogo": "We have met the enemy and he is us." Well, the enemy of economic expansion in this country is the Federal Government, especially the way it has been pursuing policies for the last 2 years. And we need to change, and I look forward to Director Elmendorf's thoughts.

Chairman CONRAD. Welcome back, Director Elmendorf, and please proceed with your testimony, and then we will go to questions.

STATEMENT OF DOUGLAS W. ELMENDORF, DIRECTOR, CONGRESSIONAL BUDGET OFFICE

Mr. ELMENDORF. Thank you, Chairman Conrad, Senator Gregg, and members of the Committee. I appreciate the opportunity to discuss the economic outlook and CBO's analysis of the potential impact on the economy of various fiscal policy actions. My comments will summarize our lengthy written statement.

Although the recession ended officially more than a year ago, the economy has not bounced back quickly. Employment now stands roughly 10 million below the level it would have reached if the recession had not occurred. Measured unemployment would be even higher today had there not been a considerable fall-off in the rate of participation in the labor force as the lack of available jobs caused some people to stop looking for one.

CBO expects, as do most private forecasters, that the economic recovery will proceed at a modest pace during the next few years. International experience shows that recoveries from recessions that began with financial crises tend to be slower than average. Following such a crisis, it takes time for equity in other asset markets to recover, for households to replenish their resources and boost their spending, for financial institutions to restore their capital bases, and for businesses to regain the confidence needed to invest in plant and equipment. Weak demand for goods and services resulting from these and other factors is the primary constraint on the recovery.

Under current laws governing Federal spending and revenues, CBO expects the unemployment rate to remain above 8 percent until 2012 and above 6 percent until 2014. And we released an issue brief in April that reviewed the evidence on the effects on people of losing jobs during recessions.

Policymakers cannot reverse all of the effects of the housing and credit boom, the subsequent bust and financial crisis, and the severe recession. However, in CBO's judgment, there are both monetary and fiscal policy actions that, if applied at a sufficient scale, would increase output and employment during the next few years. But there would be a price to pay. Those fiscal policy options would increase Federal debt, which is already larger relative to the size of the economy than it has been in more than 50 years and is headed higher.

If taxes were cut permanently or Government spending increased permanently, and no other changes were made to fiscal policy, the Federal budget would be on an unsustainable path and the economy would suffer. Even if tax cuts or spending increases were temporary, the additional debt accumulated during that temporary period would weigh on the economy over time.

But there is no intrinsic contradiction between providing additional fiscal stimulus today while the unemployment rate is high and many factories and offices are underused and imposing fiscal restraint several years from now when output and employment will probably be close to their potential.

If policymakers wanted to achieve both short-term stimulus and medium- and long-term sustainability, a combination of policies would be required: changes in taxes and spending that would widen the deficit now but reduce it relative to baseline projections after a few years.

To assist policymakers in their decisions, CBO has quantified the effects of some alternative fiscal policy actions. In a report last January to which the Chairman referred, we analyzed a diverse set of temporary policies and reported their 2-year effects on the economy per dollar of budgetary cost—what you might call the "bang for the buck." The overall effects of those policies would depend also on the scale at which they were implemented. Making a significant difference in an economy with an annual output of nearly $15 trillion would involve a considerable budgetary cost.

This figure summarizes CBO's key findings. A temporary increase in aid to the unemployed would have the largest effect on the economy per dollar of budgetary cost. A temporary reduction in payroll taxes paid by employers would also have a large bang for the buck as it would both increase demand for goods and services and provide a direct incentive for additional hiring.

Temporary expensing of business investment and providing aid to states would have smaller effects. And yet smaller effects would arise from a temporary increase in infrastructure investment or a temporary across-the-board reduction in income taxes.

In that January study, we explained that those temporary policy actions would lead to the accumulation of additional Government debt that would reduce incomes beyond the next few years unless other policies were adopted that had offsetting effects. However, we did not quantify those future reductions in income at that time.

At the request of the Chairman, we have now estimated the short-term and longer-term effects of extending the 2001 and 2003 tax cuts, extending higher exemption amounts for the AMT, and reinstating the estate tax as it stood in 2009 adjusted for inflation.

The methodology for our analysis was quite similar to the methodology that we follow in analyzing the President's budget each spring. We used several different models and made different assumptions about people's behavior. The models used to estimate the effects on the economy in 2011 and 2012 focused on the policy's impact on the demand for goods and services because we think that economic growth in the near term will be restrained by a shortfall in demand.

In contrast, the models used to estimate effects on the economy in 2020 and beyond focused on the policy's impact on the supply of labor and capital because we think that economic growth over that longer horizon will be restrained by supply factors.

As shown on the left side of this figure, we examined four alternative approaches to extending those tax cuts, and working my way down in order: a full, permanent extension that would extend all of the provisions permanently; a partial permanent extension that would extend permanently all of the provisions except those applying only to high-income taxpayers; a full extension through 2012 that would extend all provisions but only through 2012; and a partial extension through 2012 that would extend through 2012 all provisions except those applying only to high-income taxpayers.

As CBO has reported before, permanently or temporarily extending all or part of the expiring income tax cuts would boost output and employment in the next few years relative to what would occur under current law where those tax cuts expire. That would occur because, all else being equal, lower tax payments increase demand for goods and services, and thereby boost economic activity. A permanent extension, whether full or partial, would provide a larger boost to income and employment in the next 2 years than would a temporary extension. And a full extension would provide a larger boost than with a corresponding partial extension. However, the effects of extending those tax cuts on the economy in the longer term would be very different from their effects during the next 2 years.

The long-term effects would be the net result of two competing forces. On the one hand, lower tax revenues increase budget deficits, all else being equal, and thereby Government borrowing, which reduces economic growth by crowding out investment.

Chairman CONRAD. Excuse me, just on that point. Do you have a slide that shows the longer term?

Mr. ELMENDORF. Yes. I was going to make the point and then show you the results, but those are the longer-term results. What you cannot see in the picture is the netting of these two forces. So, on the one hand, there is the effect of increasing Government borrowing which crowds out investment and reduces economic growth. On the other hand, lower tax rates boost people's work effort and saving, which increases economic activity and income. And the net effect of these policy changes—or the overall effect is the netting of these two different forces.

For some of the options, our estimates of the net effects of the forces based on different models and assumptions span a broad range. This figure, however, shows the averages of the estimates across different models and assumptions for 2020. It indicates that all four of the options for extending the tax cuts would probably reduce national income in 2020 relative to what would occur under current law where those tax cuts expire. Beyond 2020, the reductions in national income from all of the alternative tax extensions become larger, especially for the permanent extensions.

Moreover, a permanent extension of the tax cuts combined with the budgetary pressures posed by the aging of the population and rising costs for health care would put Federal debt on an unsustainable path. Specifically, a permanent extension that was not accompanied by future increases in other taxes or reductions in Federal spending would roughly double the projected budget deficit in 2020 from about $700 billion to about $1.4 trillion.

A permanent extension except for certain provisions that would apply only to high-income taxpayers would increase the budget deficit by roughly three-quarters to four-fifths as much. Similarly, and also shown in the picture, permanent large increases in spending—for example, increases in discretionary appropriations in step with GDP rather than with inflation, as assumed in our baseline—that were not accompanied by reductions in other spending or tax increases would also put Federal debt on an unsustainable path.

If policymakers adopted either of those policies shown, putting Federal debt back on a sustainable path would require future increases in taxes or reductions in spending that would amount to a large share of the budget.

Thank you.

[The prepared statement of Mr. Elmendorf follows:]

Congressional Budget Office

Testimony

Statement of
Douglas W. Elmendorf
Director

The Economic Outlook and Fiscal Policy Choices

before the
Committee on the Budget
United States Senate

September 28, 2010

This document is embargoed until it is delivered at 10:00 a.m. (EDT) on Tuesday, September 28, 2010. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.

CONGRESSIONAL BUDGET OFFICE
SECOND AND D STREETS, S.W.
WASHINGTON, D.C. 20515

Chairman Conrad, Senator Gregg, and Members of the Committee, thank you for the invitation to testify on the outlook for the economy and the important fiscal policy choices facing the nation.

Summary

This testimony reviews the Congressional Budget Office's (CBO's) recent analyses of the economic outlook and the potential impact on the economy of various fiscal policy options. It also adds to those analyses by quantifying the economic impact of extending some or all of the 2001 and 2003 tax cuts that are scheduled to expire in three months.

The Economic Outlook

CBO expects—as do most private forecasters—that the economic recovery will proceed at a modest pace during the next few years. In its projections released in August, CBO forecast that, under current laws governing federal spending and revenues, real (inflation-adjusted) gross domestic product (GDP) would increase by 2.8 percent between the fourth quarter of 2009 and the fourth quarter of 2010 and by 2.0 percent between the fourth quarters of 2010 and 2011. With economic growth so slow, the unemployment rate would remain above 8 percent until 2012 and above 6 percent until 2014. Since CBO completed that forecast, the economic data released have been weaker than the agency had expected, so if CBO was redoing the forecast today, it would project slightly slower growth in the near term.

The pace of recovery since the recession ended in June 2009 and the growth that CBO projects for the next few years are anemic relative to the rate of recovery following previous deep recessions. However, the most recent recession, spurred by a financial crisis, was unlike any this country has seen for a very long time, and there is reason to expect that the country's recovery will also be different from past ones: International experience suggests that recoveries from recessions that begin with financial crises tend to be slower than average.[1] Following such a crisis, it takes time for equity and asset markets to recover, for households to replenish their resources and boost their spending, for financial institutions to restore their capital bases, and for businesses to regain the confidence required to invest in new plant and equipment. In addition, the scheduled increases in taxes and the waning of fiscal policy measures that supported the economy earlier in this recovery will hold down spending, especially in 2011. The weak demand for goods and services resulting from those various factors is the primary constraint on economic recovery.

A weak economy has serious social consequences. In addition to the millions of Americans who are officially unemployed, many others are underemployed or have left the labor force. Moreover, the unemployment rate has risen disproportionately for men,

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1. See, for example, Carmen Reinhart and Kenneth Rogoff, "The Aftermath of Financial Crises," *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472.

for less-educated workers, and for people living in certain states, and long-term unemployment has increased strikingly—to the point that the incidence of unemployment lasting longer than 26 weeks is now the highest by far in the past 60 years. Of course, losing a job often has a significant impact on workers and their families, both in the short term and in the long term.

Fiscal Policy Approaches and Long-Term Budgetary Constraints

Policymakers cannot reverse all of the effects of the housing and credit boom, the subsequent bust and financial crisis, and the deep recession. However, in CBO's judgment, there are both monetary and fiscal policy options that, if applied at a sufficient scale, would increase output and employment during the next few years. Those same fiscal policy options would, though, have longer-term economic costs. In particular, the cuts in taxes or increases in spending that would provide a short-term economic boost would also increase federal debt.

Federal debt held by the public is already larger relative to the size of the economy than it has been in more than 50 years, and it is headed higher. According to CBO's baseline projections, under current law, debt held by the public would be close to 70 percent of GDP for most of the coming decade. But other policies could result in substantially more debt. For example, if the 2001 and 2003 tax cuts were extended, the individual alternative minimum tax (or AMT) was indexed for inflation, and future annual appropriations remained the share of GDP that they are this year, the deficit in 2020 would equal about 8 percent of GDP, and debt held by the public would reach nearly 100 percent of GDP.[2] Such a path for federal debt is clearly unsustainable. Persistent deficits and continually mounting debt would crowd out growing amounts of private investment, require rising interest payments, restrict the ability of policymakers to respond to unexpected challenges, and increase the probability of a sudden fiscal crisis.[3]

Despite that grim picture, there is no intrinsic contradiction between providing additional fiscal stimulus today, while the unemployment rate is high and many factories and offices are underused, and imposing fiscal restraint several years from now, when output and employment will probably be close to their potential. What does that mean in practice? If taxes were cut permanently, or government spending was increased permanently, and no other changes were made to fiscal policy, the federal budget would be on an unsustainable path, and the economy would suffer. Even if tax cuts or spending increases were temporary, the additional debt accumulated during that temporary period would weigh on the budget and the economy over time. Therefore, if policymakers wanted to achieve both short-term stimulus and long-term sustainability, a combination of policies would be required: changes in taxes and

2. The baseline projections reflect an assumption that future annual appropriations will be held constant in real terms, yielding estimates of discretionary spending that would be low relative to GDP by historical standards.

3. Congressional Budget Office, *Federal Debt and the Risk of a Fiscal Crisis*, Issue Brief (July 27, 2010).

spending that would widen the deficit now but reduce it relative to current baseline projections after a few years. Developing such a combination would be feasible but not easy.

If policies that widened the deficit in the near term were enacted, observers might question whether, when, and how the difficult actions to narrow the deficit later would be carried out. The most important uncertainty facing families and businesses today is uncertainty about the path of the economy, but uncertainty about government policies is probably also a drag on businesses' hiring and investing and perhaps on consumer spending as well. The enactment of policies that improved the budget outlook beyond the next few years would help to reduce that uncertainty.

CBO's Analysis of Fiscal Policy Options

To assist policymakers in their decisions, CBO has quantified the effects that some alternative fiscal policy options would have on the economy. In a January 2010 report, CBO estimated the effects of a diverse set of temporary policy options.[4] The agency reported the results in terms of the two-year effect on the economy per dollar of total budgetary cost, what one might informally call the "bang for the buck." The overall effects of those policies on the economy would depend also on the scale at which they were implemented; making a significant difference in an economy with an annual output of nearly $15 trillion would involve a considerable budgetary cost.

CBO's key conclusions from that analysis are as follows (see Figure 1):

- A temporary increase in aid to the unemployed would have a significant positive short-term effect on the economy per dollar of budgetary cost. Such an increase would slightly raise unemployment among the affected individuals, but it would also raise people's spending and thereby increase output and employment in the economy overall.

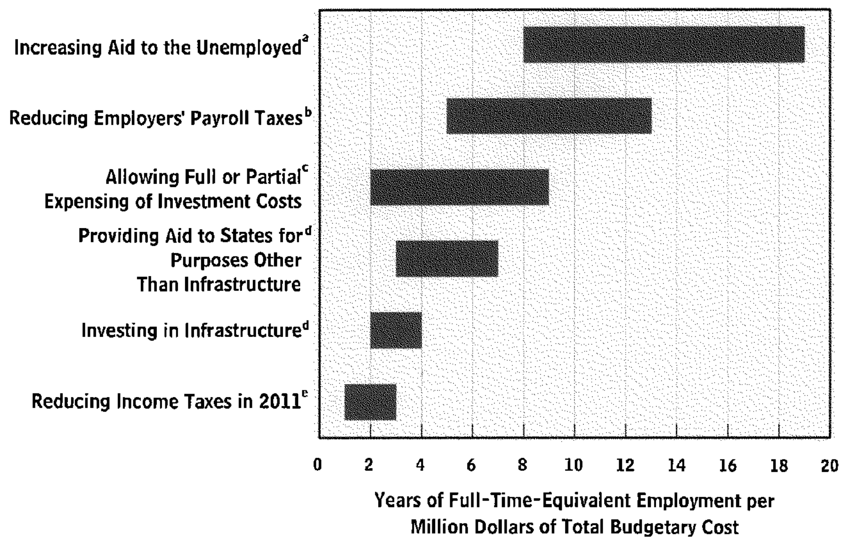
- A temporary reduction in payroll taxes—especially in the share of taxes paid by employers—would also have a significant positive short-term effect on the economy. This approach would boost output and employment both by increasing demand for goods and services and by providing an incentive for additional hiring.

- A number of other temporary policy options, including the expensing of business investment and providing aid to states, would have smaller positive short-term effects on output and employment.

4. Congressional Budget Office, *Policies for Increasing Economic Growth and Employment in 2010 and 2011* (January 2010).

Figure 1.

Ranges of Cumulative Effects of Policy Options on Employment in 2010 and 2011, Assuming Enactment in Early 2010



Source: Congressional Budget Office, *Policies to Increase Economic Growth and Employment in 2010 and 2011* (January 2010).

Note: Estimated as years of full-time-equivalent employment (40 hours of employment per week for one year) with the policy option in effect minus years of full-time-equivalent employment without the policy option. The total budgetary cost is the amount of tax revenues or budget authority over the full duration of the policies' effects unless otherwise specified.

a. Assumed spending began in March 2010, and no benefit payments would be made after July 2011.

b. Assumed to be in effect for 2010 only.

c. Assumed to be in effect for 2010 only. Initial reductions in revenues would be nearly fully offset by later increases. The policy's effects were therefore estimated per dollar of the present discounted value of the policy (discounted at businesses' cost of debt and equity) instead of per dollar of total budgetary cost.

d. Assumed budget authority was provided as of April 2010, and timing of spending from new funding would follow historical experience.

e. Assumed to extend, through 2011, the provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 that are scheduled to expire at the end of 2010, and to provide relief from the individual alternative minimum tax by extending the higher exemption amounts that were in effect in 2009 (indexed for inflation) for 2010 and 2011.

- A temporary increase in infrastructure investment and a temporary across-the-board reduction in income taxes would have still smaller short-term effects on output and employment per dollar of budgetary cost.[5]

In its January study, CBO also explained that those policy actions would lead to the accumulation of additional government debt that would reduce income in the longer term unless other policies with offsetting effects on future debt were enacted. However, CBO did not quantify those future reductions in income.

At the request of the Chairman, CBO has now estimated the short-term and the longer-term effects of certain tax policy options being considered by the Congress. In particular, CBO studied the effects of extending the 2001 and 2003 tax cuts; extending the higher exemption amounts for the AMT that were in effect in 2009 (adjusted for inflation) for 2010 and subsequent years; and reinstating the estate tax, which expired completely in 2010, for 2011 and subsequent years at the rates in effect in 2009 and with the exemption amounts (adjusted for inflation) that applied in that year. CBO examined four alternative approaches to making those changes: a permanent change affecting all provisions (labeled a "full permanent extension"), a permanent change but without extending certain provisions that would apply only to high-income taxpayers (labeled a "partial permanent extension"), a change affecting all provisions but only through 2012 ("full extension through 2012"), and a change through 2012 but without extending certain provisions that would apply only to high-income taxpayers ("partial extension through 2012").

The methodology for this analysis was quite similar to the methodology that CBO uses in analyzing the President's budget each spring. CBO used several models that make different simplifying assumptions about people's behavior. The models used to estimate the effects on the economy in 2011 and 2012 focus on the policies' impact on the demand for goods and services, because CBO expects that economic growth in the near term will be restrained by a shortfall in demand. All else being equal, lower tax payments increase demand for goods and services and thereby boost economic activity. In contrast, the models used to estimate the effects on the economy in 2020 and later years focus on the policies' impact on the supply of labor and capital, because CBO believes that economic growth over that longer horizon will be restrained by supply factors. All else being equal, lower tax revenues increase budget deficits and thereby government borrowing, which crowds out investment, while lower tax rates increase people's saving and work effort; the net effect on economic activity depends on the balance of those forces. Because the responsiveness of people's

5. CBO focused on the effects of policy options during 2010 and 2011, and most of the across-the-board tax cut studied would not occur until halfway through that period. If CBO updated those estimates today and examined the impact during the 2011–2012 period, a temporary across-the-board reduction in income taxes would have a larger effect per dollar of budgetary cost but would still, by that measure, significantly trail most of the other options studied.

work effort to changes in their after-tax compensation is uncertain, CBO produced estimates based on alternative assumptions about such behavioral responses.[6]

Notwithstanding CBO's use of alternative models and assumptions, the actual effects of the policy options studied could fall above or below the estimates that CBO reports. With that caveat, the key findings are these:

- All four of the options for extending the expiring income tax cuts would raise output, income, and employment during the next two years, relative to what would occur under current law (see Figure 2). A full permanent extension or partial permanent extension would provide a larger boost to income and employment in the next two years than would a temporary extension, and a full extension would provide a larger boost than would the corresponding partial extension.

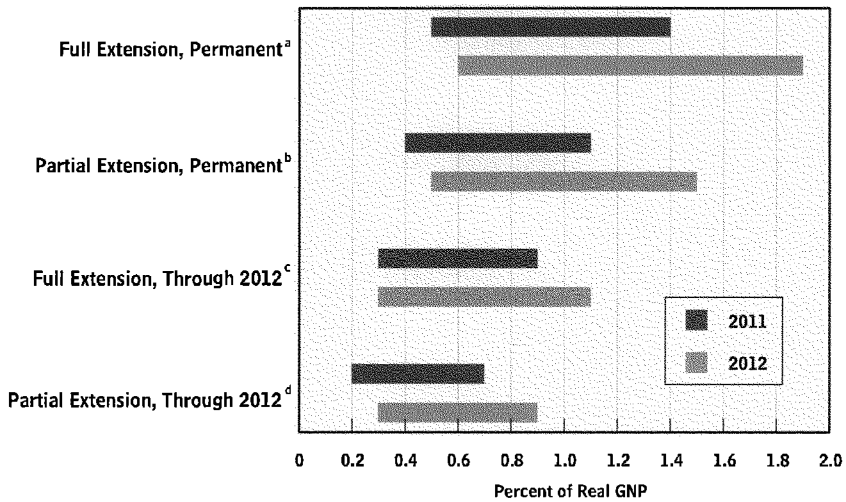
- But the effects of those policy options on the economy in the longer term would be very different from their effects during the next two years. For some of the options, the estimates based on different models and assumptions cover a broad range. Still, the estimates indicate that all four of the options would probably reduce income relative to what would otherwise occur in 2020 (see Figure 3, which shows the averages of the projected changes in GNP across the various models and assumptions). Beyond 2020, and again relative to what would occur under current law, the reductions in income from all four of the policy options would become larger. Either a full or a partial extension of the tax cuts through 2012 would reduce income by much less than would a full or partial permanent extension.

In sum, and as CBO has reported before, permanently or temporarily extending all or part of the expiring income tax cuts would boost income and employment in the next few years relative to what would occur under current law. However, even a temporary extension would add to federal debt and reduce future income if it was not accompanied by other changes in policy. A permanent extension of all of those tax cuts without future increases in taxes or reductions in federal spending would roughly double the projected budget deficit in 2020; a permanent extension of those cuts except for certain provisions that would apply only to high-income taxpayers would increase the budget deficit by roughly three-quarters to four-fifths as much. As a result, if policymakers then wanted to balance the budget in 2020, the required increases in taxes or reductions in spending would amount to a substantial share of the budget—and without significant changes of that sort, federal debt would be on an unsustainable path that would ultimately reduce income. Similarly, even temporary increases in government spending would add to federal debt and reduce future income, and

6. CBO's models incorporate different magnitudes of the responsiveness of saving to changes in the return on saving, but CBO did not produce explicit sensitivity analyses of the effect of variations in this parameter.

Figure 2.

Ranges of Effects of Four Tax Policy Options on Real GNP in 2011 and 2012



Source: Congressional Budget Office.

Note: Estimated as gross national product adjusted for inflation (real GNP) with the policy option in effect relative to real GNP without the policy option.

a. This option would extend the provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 that are scheduled to expire at the end of 2010; extend the higher exemption amounts from the individual alternative minimum tax that were in effect in 2009 (adjusted for inflation) for 2010 and subsequent years; and reinstate the estate tax—which expired completely in 2010—for 2011 and subsequent years at the rates in effect in 2009 and with the exemption amounts (adjusted for inflation) that applied in that year.

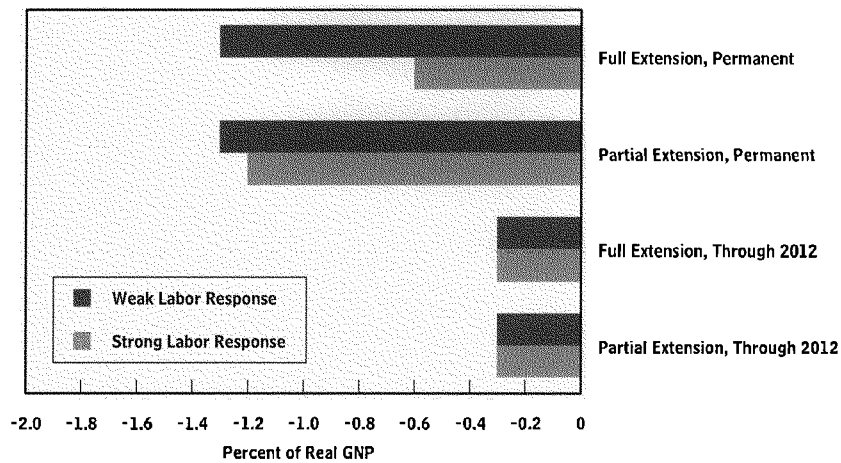
b. This option is the same as the full extension, except that certain provisions would expire that would otherwise have applied to married couples with income of $250,000 or more and single taxpayers with income of $200,000 or more. Those provisions include the lower tax rates in the top two income tax brackets, the lower 15 percent tax rates on capital gains and dividends, and the elimination of the phaseout of itemized deductions and personal exemptions.

c. This option would make the same changes as the full extension, but through 2012 rather than permanently.

d. This option would make the same changes as the partial extension, but through 2012 rather than permanently.

Figure 3.

Effects of Four Tax Policy Options on Real GNP in 2020



Source: Congressional Budget Office.

Note: Estimated as gross national product adjusted for inflation (real GNP) with the policy option in effect minus real GNP without the policy option. Based on the average of four estimates of effects from a life-cycle model, which accounts for additional policy changes needed to put fiscal policy on a sustainable path in the long run, and two estimates of effects from a "textbook" growth model, without additional policy changes. Averages are reported to the nearest tenth. Weak and strong labor responses correspond to the responsiveness of hours worked to changes in the effective marginal tax rate on labor income. For a description of the tax policy options, see the notes to Figure 2.

permanent large increases in spending that were not accompanied by other spending reductions or tax increases would put federal debt on an unsustainable path. Compared with the options examined here for extending the expiring tax cuts, various other options for temporarily reducing taxes or increasing government spending would provide a bigger boost to the economy per dollar of cost to the federal government.

The Economic Outlook

Growth in the nation's output since mid-2009 has been anemic in comparison with that of previous recoveries from deep recessions, and the unemployment rate has remained quite high, standing at 9.6 percent in August. That weak performance reflects several factors that are likely to remain in place over the next few years. The considerable number of vacant houses and underused factories and offices will be a continuing drag on residential construction and business investment. In addition, although conditions in financial markets have improved markedly from what they were in the depths of the recent crisis, households' wealth remains below prerecession

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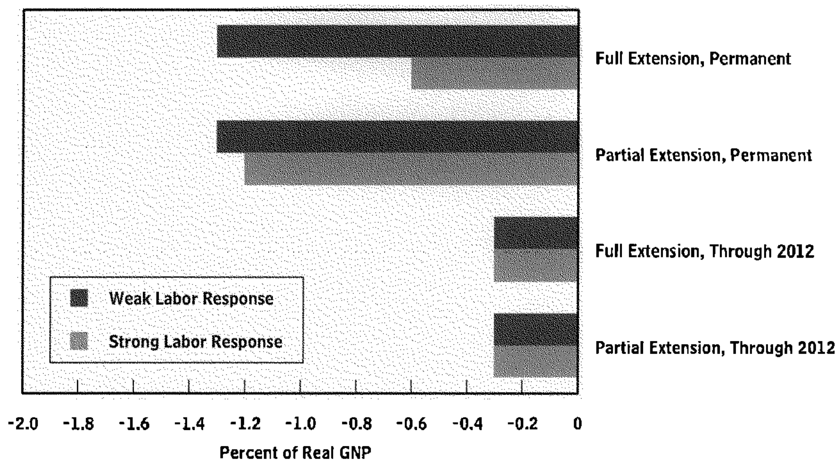

Source: Congressional Budget Office.

Note: Estimated as gross national product adjusted for inflation (real GNP) with the policy option in effect minus real GNP without the policy option. Based on the average of four estimates of effects from a life-cycle model, which accounts for additional policy changes needed to put fiscal policy on a sustainable path in the long run, and two estimates of effects from a "text-book" growth model, without additional policy changes. Averages are reported to the nearest tenth. Weak and strong labor responses correspond to the responsiveness of hours worked to changes in the effective marginal tax rate on labor income. For a description of the tax policy options, see the notes to Figure 2.

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As a result of those factors, CBO projects that the economic recovery will continue at a modest pace during the next few years.[7] Slow growth in output will generate slow growth in the demand for labor. The unemployment rate is likely to remain high for a prolonged period, which will have serious economic and social consequences.

CBO's Baseline Economic Forecast

Given the assumptions about fiscal policy that underlie the baseline, CBO projects that real GDP will increase by 2.8 percent between the fourth quarters of 2009 and 2010 and by 2.0 percent between the fourth quarters of 2010 and 2011. After 2011, the projected growth of real GDP picks up, averaging 4.1 percent annually from 2012 through 2014; at that pace, GDP will reach its estimated potential level by the end of 2014.

The modest growth in output projected for the next two years points to sluggish growth in employment during the remainder of this year and next. Consequently, the unemployment rate in CBO's projections declines slowly, falling to 9.3 percent at the end of 2010 and 8.8 percent at the end of 2011. After 2011, growth in employment rises along with growth in output, and the unemployment rate declines more rapidly, reaching 5.1 percent at the end of 2014.

Inflation in the prices of consumer goods and services is projected to be about 1 percent in 2010 and 2011, when measured on a fourth-quarter-to-fourth-quarter basis using the price index for personal consumption expenditures. In CBO's projections, inflation picks up moderately thereafter but remains below 2 percent from 2012 through 2014. Interest rates also remain very low through the end of 2011 and then rise gradually as the recovery continues.

Economic forecasts are subject to a considerable degree of uncertainty, and many factors could lead to economic performance that is substantially different from CBO's projections. In fact, new information has already become available since the agency completed its forecast in early July. The latest data indicate that the growth in spending by households and businesses has been weaker than anticipated in CBO's forecast,

7. See Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2010).

suggesting that growth in the near term is likely to be a bit slower than the agency anticipated.

Conditions in Some Key Sectors

The tepid nature of the recovery owes importantly to conditions in several key sectors of the economy—housing, international trade, and financial markets.

Housing. The housing sector, which was at the center of the problems that triggered the recession, remains weak. Home builders began construction on residential housing at an annual rate of 600,000 units during the first eight months of this year. That figure is more than the number of housing starts in 2009 (which was about 550,000 units, the lowest since at least 1958) but still well below the estimated 1.5 million units that would be necessary to keep up with the growth of the population and the replacement of obsolete units. Those low rates of housing starts primarily reflect the unusually high number of vacancies among existing housing units—by CBO's estimate, about 2.6 million more than would normally be expected. Low levels of construction over the past two years have failed to diminish that number because the recession and a sharp rise in mortgage foreclosures have reduced the number of people able to maintain independent households.

CBO expects housing starts to pick up this year and to continue to grow next year. However, because so many vacant units exist and the construction of multifamily housing has been inhibited by the difficulty of obtaining credit for commercial real estate, housing starts will probably not return to levels consistent with population growth and the demand for replacement units until late 2012.

House prices are also unlikely to start rising significantly until the inventory of unsold homes shrinks considerably. Those prices have been falling since 2007, and although the recent data show some evidence that prices are stabilizing, CBO forecasts that the national average price of a house will drop by an additional 7 percent between the middle of 2010 and the fall of 2011.

International Trade. Net exports (that is, the difference between exports and imports) declined sharply in the first half of this year. Although exports rose faster than in the past few years, imports grew even more. CBO expects that net exports will continue to be a drag on the growth of real GDP in the coming year. The average pace of economic recovery among the United States' trading partners is expected to be slow, dampening demand for U.S. exports. Net exports are also likely to decline in the near term because of the increase in foreign demand for U.S. financial assets stemming from the fiscal crisis in some European countries.

Financial Markets. Conditions in financial markets improved last year and early this year as the effects of the financial crisis diminished and the economy strengthened, although problems persist in some sectors. Financial conditions deteriorated a bit during the second quarter of 2010, apparently reflecting concerns about the strength and durability of the economic recovery in the United States and about the debt burden of some European governments and its threat for the health of some financial institutions in Europe. Even though some degree of stability appears to have returned, those concerns have continued to weigh on global financial markets. Nevertheless, corporations' cost of raising funds remains quite favorable relative to long-term historical averages. Most small businesses report that, although they are concerned about the availability of credit, their larger concern is about whether they will have adequate sales. Although banks' willingness to lend to consumers has improved, the demand for loans is still weak.

Despite the general improvement in financial markets, some markets have yet to recover fully—especially the banking sector and the markets for asset-backed securities. Before the crisis, those securities, which are backed by loans on real estate or other assets, provided a significant amount of funding for loans to consumers and other borrowers. With markets for such securities still troubled, some potential borrowers are having difficulty obtaining loans for which they would qualify under normal conditions.

The Effect of Current-Law Fiscal Policies on CBO's Baseline Economic Forecast

Through both higher federal spending and lower tax receipts, the federal budget has provided substantial support to economic activity during the downturn. Under current laws regarding taxes and spending, that support will diminish very rapidly over the next few years: In its baseline, CBO projects that between fiscal years 2010 and 2012, the federal budget deficit will decline by about $675 billion (or from 9.1 percent to 4.2 percent of GDP). That reduction would be the sharpest two-year decline in the deficit relative to GDP since shortly after World War II.

Several factors contribute to the coming reduction in fiscal stimulus, including the expiration of numerous tax and spending provisions of current law and the diminishing effects of the automatic responses of federal tax revenues and spending to cyclical changes in the economy—the so-called automatic fiscal stabilizers. The temporary relief from the individual alternative minimum tax that was enacted most recently in the American Recovery and Reinvestment Act of 2009 (ARRA) expired at the end of last year. Without the relief from the AMT, tax rates and liabilities for 2010 are already higher for some people than they were last year. But CBO estimates that almost all of the economic effects of those increases will occur in 2011, when nearly all of the additional taxes will be paid. In addition, tax reductions enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) are scheduled to expire at the end of this year. Altogether, the expiration of all of those tax provisions will deliver a significant dose of fiscal restraint in 2011: They will reduce disposable personal income by $250 billion relative to what it would otherwise be (thereby reducing people's spending, albeit by a smaller proportion) and increase marginal tax rates for some workers (thereby reducing their after-tax wages and modestly dampening the supply of labor).

Moreover, by CBO's estimate, the increase in economic activity caused by the spending increases and other tax reductions enacted in ARRA peaked in the middle of 2010. That impact is diminishing now and will continue to do so next year. As the economy strengthens and output starts to move closer to its potential level, federal fiscal stimulus will also decline as the automatic stabilizers provide less support. That is, as output increases, tax payments to the government will begin to rise, and transfer payments to households (such as unemployment insurance) will decline.

Labor Markets

The recession and the recovery that has followed have been marked by extremely weak demand for labor. Payroll employment fell by 7.3 million during the recession and by an additional 1.1 million during the second half of 2009, after the recession ended. The cumulative decline of 8.4 million jobs was the largest drop in employment in percentage terms—6.1 percent—since World War II. Although the labor market has turned up, employment gains totaled only 656,000 in the first eight months of the year (excluding temporary jobs associated with the decennial census, most of which have now ended). In contrast, if the recession had not occurred, employment would have increased during the past few years, so even with this year's increase, employment now stands roughly 10 million below the level it would have reached.

The dramatic loss of jobs pushed the unemployment rate to more than 10 percent. The unemployment rate has fallen slightly from its peak but remains high, at 9.6 percent (see Figure 4). Data from the Job Openings and Labor Turnover Survey (JOLTS) indicate that through July, there were about five unemployed workers per job opening, down from slightly over six in late 2009 but still much higher than the peak following the previous recession. The unemployment rate would be even higher had there not been a considerable falloff in the rate of participation in the labor force—the percentage of people age 16 or older who are working or seeking work—as the lack of available jobs caused some people to cease looking for a job. The labor force participation rate remains well below its prerecession level.

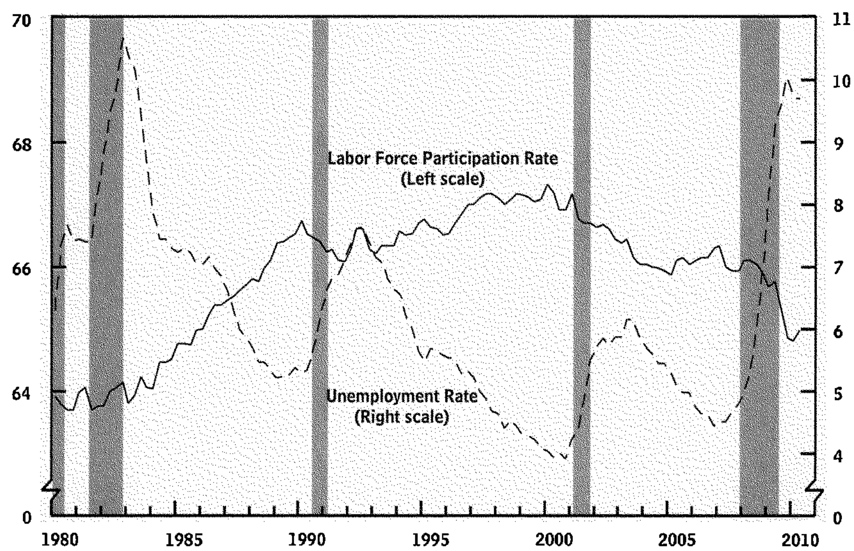
A few other measures suggest a modest improvement in labor market conditions thus far in 2010. According to data from JOLTS and from two measures of online job advertising, the number of job openings has increased significantly, though it remains a good deal below its prerecession level. Moreover, employment by temporary help services, a leading indicator for the labor market, has experienced large gains since late last year. However, new claims for unemployment insurance, which fell sharply in late 2009, have stayed stubbornly high throughout this year.

Several aspects of the rise in unemployment point to both a protracted recovery in employment and a greater degree of hardship for people who have lost their job than what people experienced following previous recessions. The share of unemployed workers whose jobs were permanently lost (or whose temporary job ended) rose much more sharply in the past few years than in previous downturns, and it has dipped only slightly since late 2009. Workers on temporary layoff have represented a smaller

Figure 4.

Labor Force Participation and Unemployment Rate, 1980 to 2010

(Percent)



Source: Congressional Budget Office based on data from the Bureau of Labor Statistics.

Note: Data are quarterly and are plotted through the second quarter of 2010. The shaded bars indicate recessions.

percentage of the unemployed than they did in previous downturns. In addition, the incidence of long-term unemployment (lasting longer than 26 weeks) has been the-highest by far in the past 60 years; it continued to rise during the first half of 2010 and has fallen only a little during the past two months.

Effects of Job Losses. Some workers who have lost a job during this downturn are facing, and will continue to face, serious difficulties.[8] Some of those people will rely on unemployment insurance benefits for an extended period, and others may stop looking for work altogether.[9] Loss of a job often means a loss of health insurance for the

8. See Congressional Budget Office, *Losing a Job During a Recession*, Issue Brief (April 22, 2010).

9. Among those who lost a job involuntarily between 1981 and 2003, three groups of workers—women, older people, and less-educated people—were more likely to leave the labor force than were others who lost a job. See Henry S. Farber, "What Do We Know About Job Loss in the United States? Evidence from the Displaced Workers Survey, 1984–2004," *Economic Perspectives* (Spring 2005), pp. 13–28.

worker and perhaps for his or her family. People with health problems that make it difficult to work may decide to apply for disability benefits instead.[10]

Even among workers who find a new job, many will end up with lower earnings, not only in the short term but for many years to come. For example, among the men who lost their job in a mass layoff during the 1982 recession, earnings 15 to 20 years later were about 20 percent lower than those of similar men who did not lose their job.[11] Declines in earnings during the first few years after losing a job tend to be larger for people who become unemployed during or shortly after a recession. Those earnings losses can be particularly pronounced for older workers, who often have more tenure on the job and, as a consequence, more firm-specific knowledge or more skills that do not transfer readily to a new job. For example, among men who lost their job in a mass layoff during the 1982 recession, older workers—those ages 50 to 55—had their earnings decline in the following year by 40 percent more than did workers in their 20s and 30s.[12]

Factors Hindering Reemployment. In CBO's assessment, weak demand for labor owing to weak demand for goods and services accounts for much of the current high level of unemployment, and a smaller portion is attributable to structural changes in the economy that go beyond those that normally occur in a recession.

Regarding structural changes, the end of the housing boom and the recession have induced a reshuffling of jobs among businesses, occupations, industries, and geographical areas. Those developments suggest that gains in employment in the next several years will rely more than usual on the creation of new jobs—with different businesses, in different industries and locations, and requiring workers with different skills than those needed for the jobs that have disappeared. As a result, the movement of unemployed workers into new jobs will probably be more difficult in this recovery than in past ones.

For many workers who have lost their job, the process of acquiring new skills can take considerable time. One important example arises from the bubble in house prices and resulting surge in homebuilding, which generated a large increase in construction employment. The subsequent downsizing of the housing sector helps explain a much larger rise in the unemployment rate for men than for women (see Figure 5). Because the skills used in that sector are not readily transferable to most new jobs in expanding sectors, former construction workers can face a long search for work. Moreover, some

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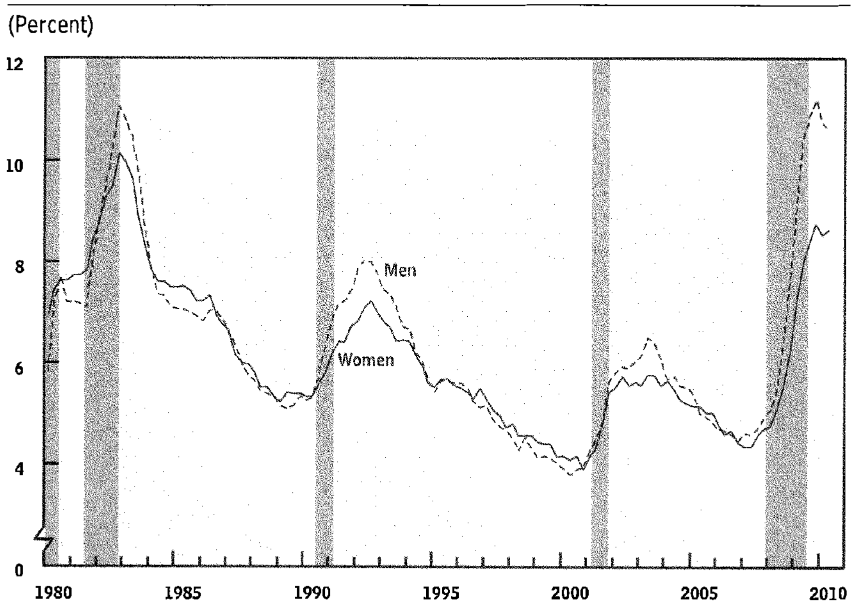
10. Relying on unemployment insurance for an extended period or applying for disability benefits both create additional pressure on the federal budget.

11. Till M. von Wachter, Jae Song, and Joyce Manchester, *Long-Term Earnings Losses Due to Mass Layoffs During the 1982 Recession: An Analysis Using U.S. Administrative Data from 1974 to 2004* (working paper, Columbia University, April 2009), www.columbia.edu/~vw2112/papers/mass_layoffs_1982.pdf.

12. See von Wachter, Song, and Manchester, *Long-Term Earnings Losses Due to Mass Layoffs During the 1982 Recession.*

Figure 5.

Unemployment Rate, for Men and for Women, 1980 to 2010



Source: Congressional Budget Office based on data from the Bureau of Labor Statistics.

Note: Data are quarterly and are plotted through the second quarter of 2010. The shaded bars indicate recessions.

employers have reorganized and upgraded their production systems during the recession to improve productivity. In such cases, unemployed workers may not be able to return to a job in the same industry because their skills have become obsolete.

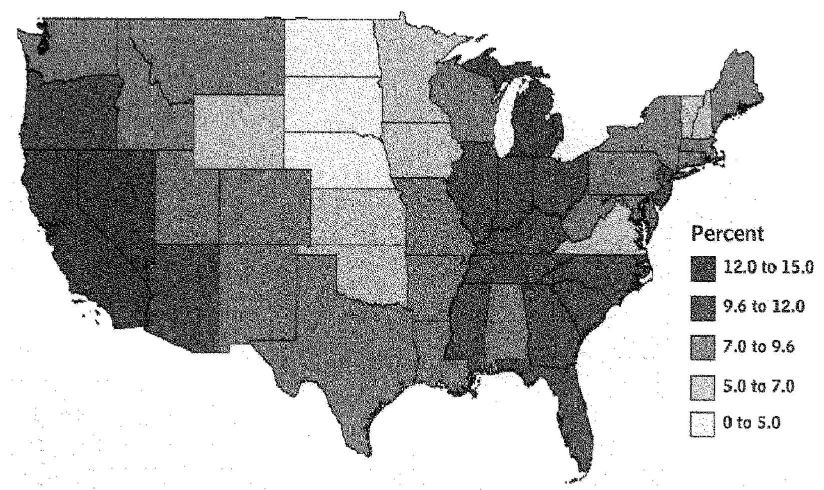
Workers who are unemployed for long periods of time can face even greater obstacles in finding a new job. Such workers are more likely not to have learned about the latest technologies and, because of a diminished social network, may have less knowledge of job opportunities. In addition, some employers may assume that long-term unemployment is a signal that a worker is not good at his or her job.

Furthermore, the sharp reduction in house prices, which left many homeowners owing more on their mortgage than their home is worth, is making relocating more difficult than usual.[13] Such immobility can prevent unemployed workers from finding

13. Homeowners who owe more on their mortgage than their house is worth are less likely to move. See Fernando Ferreira, Joseph Gyourko, and Joseph Tracy, "Housing Busts and Household Mobility," *Journal of Urban Economics*, vol. 68, no. 1 (July 2010), pp. 34–45.

Figure 6.

Unemployment Rate, by State, August 2010



Source: Congressional Budget Office based on data from the Bureau of Labor Statistics.

potential employers. The unemployment rates in different states vary greatly, as some states that were hit hardest by the bursting of the housing bubble (such as California and Nevada) continue to have rates that are much higher than those of other states (see Figure 6).[14] The extent to which workers' immobility contributes to the current high unemployment rate nationally is unclear, because demand for labor is weak in so many parts of the country. However, immobility could play a larger role when the demand for labor strengthens in certain areas.

The labor market has also been affected by the extensions of unemployment insurance benefits enacted in the past few years. Those extensions have encouraged some people to stay in the labor force and collect benefits instead of leaving the labor force, and they have reduced the intensity of some workers' efforts to search for a new job because the benefits reduce the hardship of being unemployed.[15] Those effects of the

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14. In previous bouts of high unemployment, unemployment rates in some states decreased significantly only when many of the unemployed workers moved to different states. See William H. Frey, *The Great American Migration Slowdown: Regional and Metropolitan Dimensions* (Washington, D.C.: Brookings Institution, December 2009).

15. Recent research suggests that the effect of extended unemployment insurance benefits on the duration of unemployment for the average worker who receives such benefits is rather small. See Daniel Aaronson, Bhashkar Mazumder, and Shani Schechter, "What Is Behind the Rise in Long-Term Unemployment?" *Economic Perspectives*, Federal Reserve Bank of Chicago (2010); and Rob Valetta and Katherine Kuang, "Extended Unemployment and UI benefits," *Economic Letter*, Federal Reserve Bank of San Francisco (April 19, 2010).

benefit extensions tend to increase the unemployment rate. However, other effects of the extensions work in the opposite direction, making it difficult to assess their net impact. For example, jobs that are not sought by workers receiving unemployment insurance may go instead to individuals who are not eligible for such benefits (such as new entrants to the labor force) and might otherwise be unemployed themselves. In addition, unemployment insurance facilitates mobility to new occupations by providing a safety net if such transitions do not work out. Moreover, the benefit extensions have led to greater spending by the recipients and thereby greater demand for goods and services in the economy as a whole; that effect tends to lower unemployment and boost employment. In CBO's assessment, the extensions of unemployment insurance benefits have increased employment, although because they have affected labor force participation as well, their effect on the unemployment rate is less clear.

Policy Options

Although policy actions could not offset all of the effects of the boom in the housing and credit markets, the subsequent bust and financial crisis, and the severe recession, both monetary and fiscal policy could, if applied sufficiently vigorously, accelerate the recovery in output and employment during the next few years. However, fiscal policy options that would improve circumstances in the short term would have economic costs in the longer term. In particular, the cuts in taxes or increases in spending that would provide a short-term economic boost would also increase federal budget deficits and debt, thereby weakening economic growth in the long run. Policies that offer more bang for the buck in providing short-run stimulus could help minimize those long-term costs.

Monetary Policy Options

Given current economic conditions and CBO's projection of continued high unemployment and low inflation next year, the agency assumes that the Federal Reserve will not begin to raise the federal funds rate until 2012.[16] Indeed, based on previous experience, most variants of a widely recognized rule (the Taylor Rule) for adjusting the funds rate imply that the Federal Reserve should lower that rate considerably in order to boost economic activity and inflation. That traditional approach is not feasible, however, because the funds rate has been barely above zero since December 2008.

Still, as Federal Reserve Board Chairman Bernanke explained in a speech in late August, the Federal Reserve has several monetary policy tools available, although use of those tools involves risks.[17] According to Chairman Bernanke, the most important tool appears to be the ability to buy additional longer-term securities in order to bring

16. The federal funds rate is the interest rate that financial institutions charge each other for overnight loans of their monetary reserves, and it is the principal tool of monetary policy.

17. See Ben S. Bernanke, "The Economic Outlook and Monetary Policy," speech at the Federal Reserve Bank of Kansas City Economic Symposium, Jackson Hole, Wyoming (August 27, 2010).

down longer-term interest rates. To be sure, the effects of such purchases are quite uncertain. The Federal Reserve has not typically bought and sold such assets with the intention of moving longer-term interest rates, so it is not clear how much a given amount of purchases would reduce interest rates. Also, even if the Federal Reserve was successful in lowering longer-term interest rates, it is not clear how much a given reduction in interest rates would spur borrowing and spending in the current economic environment. However, there seems little reason to doubt that asset purchases in sufficient volume would encourage spending—although that volume might be quite large. In his talk, Chairman Bernanke acknowledged the risk that people would be uncertain about the Federal Reserve's ability to withdraw such stimulus later, and other observers worry about greater government involvement in capital markets, especially if the Federal Reserve purchased securities other than ones issued by the government.

Chairman Bernanke also discussed other tools, including making clear in its policy statements its intention that interest rates will remain extraordinarily low for an extended period; reducing the interest paid on excess reserves; and raising the target for inflation in the medium term. Again, the effects of using those tools would be very uncertain, and, as Chairman Bernanke described, such actions would incur a number of risks.

Fiscal Policy Options

Changes in taxes and government spending can affect the economy both by changing the potential supply of goods and services and by changing demand for them. Over the long run, the nation's potential to produce goods and services depends on the size and quality of its labor force, on the stock of productive capital (such as factories, vehicles, and computers), and on the efficiency with which labor and capital are used to produce goods and services.[18] Changes in those determinants of potential output can have a lasting influence on the economy's ability to supply goods and services. In particular, changes in tax rates affect people's willingness to work and to save, influencing short-run demand but also affecting long-term supplies of labor and capital. Changes in tax rates can also affect businesses' decisions about investment and hiring, and they can affect decisions about the allocation of capital investment among sectors and locations.

As the recent severe recession has shown, economic activity can deviate for substantial periods from its potential level in response to changes in aggregate demand (the total purchases of a country's output of goods and services by consumers, businesses, governments, and foreigners). When demand for goods and services falls short of the economy's ability to produce them, as is the case currently, tax cuts or government spending increases can increase demand and thereby hasten a return to the potential level of output. Nevertheless, demand-side effects are usually only temporary: They

18. Efficiency in turn depends on such factors such as production technology, the way businesses are organized, and the regulatory environment.

raise or lower output relative to what it would be otherwise only for a while because, over time, stabilizing economic forces tend to move output back toward its potential.

Fiscal policies that aim to increase demand are likely to decrease output and income in the long run because such policies usually increase government borrowing and reduce the nation's saving and capital stock. Therefore, policies that increase demand often involve a trade-off between short-term benefits and longer-term costs. Indeed, to prevent unchecked growth in government debt, future policy changes are usually needed to offset the budgetary impact of stimulative policies.[19]

Depending on the policy enacted, the future policy changes that would be needed to maintain fiscal sustainability could be substantial. For example, CBO projects that, under current law, the gap between revenues and spending in 2020 would be about $700 billion. Under an alternative policy assumption that the 2001 and 2003 tax cuts are extended and the AMT is indexed for inflation, the gap would grow to $1.4 trillion, about 6 percent of GDP. If policymakers enacted those policy changes and wanted to balance the budget in 2020, they would need to increase tax revenues by one-third, reduce spending by one-quarter, or enact some combination of those approaches.

What would it mean to raise tax revenues by one-third in 2020? One possibility would be to increase revenues from the individual income tax by about two-thirds; another possibility would be to increase revenues from the corporate income tax by three-and-a-half times. On the other side of the government budget, what would it mean to cut spending by one-quarter in 2020? That amount would be a bit more than total projected spending on Social Security; almost as much as the combined spending on Medicare, Medicaid, and other health programs; much more than the spending on defense; and slightly more than all other federal spending apart from net interest.

Estimated Short-Term Effects of Alternative Tax and Spending Policies

In its January 2010 report, CBO analyzed various policies for promoting economic growth and increasing employment.[20] That analysis focused on the effects of the policies in 2010 and 2011, assuming that they would be enacted in early 2010. If CBO repeated the analysis today, the precise estimates would be somewhat different because

19. If a policy changes revenues and spending in a way that increases the deficit, the resulting shortfall will compound over time as the government's interest payments rise. Unless the government enacts an offsetting policy, the ratio of debt to output will be driven ever higher (under the assumption, which CBO's analysis incorporates, that the rate of interest on government debt will be higher than the rate of economic growth).

20. Congressional Budget Office, *Policies to Increase Economic Growth and Employment in 2010 and 2011.*

of small methodological changes and evolving economic conditions, but the qualitative pattern of the estimates would be quite similar.[21]

Different policy options would work somewhat differently depending on whether they sought to support spending by households, businesses, or governments. Policy options aimed at assisting households would spur demand for goods and services to varying degrees and thereby boost production to varying degrees. Because businesses' decisions on investing and hiring depend on the demand for their products, higher demand and production would lead to more investment and hiring. The size of those effects would depend largely on which households got the money. Policies that would temporarily increase the after-tax income of people who are relatively well off would probably have little effect on their spending, but policies that increased the resources of families with lower income, few assets, and poor credit would probably have a larger impact on their spending. Because of the extent of job losses and declines in asset prices in this recession, more families probably have those attributes now than was the case in the immediate aftermath of many previous recessions.

Policy options that supported businesses would operate somewhat differently. For example, if firms faced a temporary reduction in labor costs, they would probably respond through a combination of four channels. First, some firms would respond to lower employment costs by reducing the prices they charge in order to sell more goods or services. Those higher sales would in turn spur production, which would then increase hours worked and hiring. Second, some firms would pass the tax savings on to employees in the form of higher wages or other forms of compensation, which in turn would encourage more spending by those employees. Third, some firms would retain the tax savings as profits, and the resulting greater wealth would encourage more consumption by some households. Fourth, some firms would use slightly more labor during a period when it was temporarily less expensive. Or, if firms could realize the tax benefits of depreciation deductions more quickly, they would have a greater incentive for investment because a dollar of tax benefit this year is more valuable than a dollar of tax benefit in a future year.

Additional government spending would also boost output and employment. Effects would occur directly through the government-funded activity and indirectly through increases in demand for goods and services resulting from the higher income of the households and firms that directly benefited from the government activity.

In CBO's analysis, the effect of a policy on output was measured by the cumulative effects on GDP for each dollar of total budgetary cost (that cost equals the additional federal spending or reduction in federal tax revenues). The effect of a policy on employment was measured by the cumulative effects on years of full-time-equivalent

21. The methodology used for those estimates was comparable to the methodology used in CBO's estimates of the economic effects of ARRA. See Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output From April 2010 Through June 2010* (August 2010).

employment for each dollar of total budgetary cost (a year of full-time-equivalent employment is 40 hours of employment per week for one year). By focusing on full-time-equivalent employment, the calculations included increases in the hours worked by people in part-time employment and possibly some overtime work by full-time employees. To account for uncertainty, the analysis included both a "low" estimate and a "high" estimate for the effects of each policy.

For this analysis, policies were assumed to be temporary, although some of the policies could also be designed to be permanent. The total effect of a policy on economic growth and employment would depend critically on the magnitude of the reduction in taxes or increase in spending that occurred. The largest feasible magnitude of the budgetary change varies among policies, but all of the options considered are sufficiently scalable to allow tens of billions of dollars of tax cuts or spending increases per year.

The key results of the analysis of alternative policy options are as follows (see Table 1):

- The largest effect on the economy per dollar of budgetary cost would arise from a temporary increase in aid to the unemployed. Such an increase would slightly raise unemployment among the affected individuals. However, the households receiving the additional benefits would tend to spend a very large share of them (rather than saving them) and to do that spending quickly; the increase in spending would raise demand and thereby increase output and employment in the economy overall.

- The next-largest effect on the economy per dollar of budgetary cost would arise from a temporary reduction in employers' payroll taxes. Firms would probably respond to such a tax cut through a combination of lower prices, higher wages, and higher profits. The changes in prices, wages, and profits would spur additional spending, which would boost employment. In addition, the reduced cost of labor would directly encourage the use of more labor in production. Reducing employers' payroll taxes for firms that increased their payroll would have an even higher bang for the buck because the tax cut would be linked to payroll growth and therefore would use fewer dollars to cut employers' taxes for workers who would have been employed anyway.

- Smaller but still significant effects on the economy per dollar of budgetary cost would result from a number of other policies. One such policy is a temporary reduction in employees' payroll taxes. This option would not immediately affect employers' costs, but instead would have effects similar to those of reducing other taxes for those workers—that is, it would raise spending and thus production and employment. Other policies with similar effects are providing additional one-time Social Security payments and additional temporary refundable tax credits for lower- and middle-income households. The people receiving those funds would be likely to spend a significant share of the amounts they received. Allowing for temporary expensing of business investment would have a similar bang for the buck, as would providing additional aid to states for purposes other than infrastructure, which would lead to fewer layoffs of state employees and fewer increases in state taxes.

Table 1.

Effects of Policy Options on Output and Employment in 2010 to 2015, Assuming Enactment in Early 2010

	Cumulative Effects on GDP, 2010–2015[a] (Dollars per dollar of total budgetary cost)		Cumulative Effects on Employment[b] (Years of full-time-equivalent employment per million dollars of total budgetary cost)					
			2010		2010–2011		2010–2015	
	Low	High	Low	High	Low	High	Low	High
	Policy Options with a Substantial Proportion of Impacts Beginning in 2010							
Increasing Aid to the Unemployed[c]	0.7	1.9	4	7	8	19	6	15
Reducing Employers' Payroll Taxes	0.4	1.2	3	5	5	13	4	11
Reducing Employers' Payroll Taxes for FirmsThat Increase Their Payroll	0.4	1.3	5	9	8	18	7	16
Reducing Employees' Payroll Taxes	0.3	0.9	2	4	3	9	2	7
Providing an Additional One-Time Social Security Payment	0.3	0.9	2	6	3	9	2	8
Allowing Full or Partial Expensing of Investment Costs[d]	0.2	1.0	1	3	2	9	1	8
	Policy Options with a Substantial Proportion of Impacts Beginning in 2011							
Investing in Infrastructure[e]	0.5	1.2	*	1	2	4	4	10
Providing Aid to States for Purposes Other Than Infrastructure[e]	0.4	1.1	1	1	3	7	3	9
Providing Additional Refundable Tax Credits for Lower- and Middle-Income Households in 2011	0.3	0.9	*	*	3	6	3	7
Extending Higher Exemption Amounts for the Alternative Minimum Tax	0.1	0.4	*	*	1	4	1	4
Reducing Income Taxes in 2011[f]	0.1	0.4	*	*	1	3	1	4

Source: Congressional Budget Office, *Policies to Increase Economic Growth and Employment in 2010 and 2011* (January 2010).

Notes: Different elements of spending and tax policies would have different effects on economic output per dollar of budgetary cost. CBO grouped the elements into general categories. For each category, CBO judgmentally chose low and high estimates of the effects on economic output per dollar of budgetary cost. CBO combined those estimates with projections of how changes in output affect participation in the labor force and the unemployment rate to produce estimates of effects on employment, hours per worker, and full-time-equivalent employment (40 hours of employment per week for one year).

Unless otherwise specified, spending policy options were assumed to provide budget authority as of April 2010, tax policy options were assumed to be in effect for 2010 only, and the total budgetary cost is the amount of tax revenues or budget authority over the full duration of the policies' effects.

* = between zero and 0.5.

a. Estimated as gross domestic product (GDP) with the policy option in effect relative to GDP without the policy option.

b. Estimated as years of full-time-equivalent employment with the policy option in effect minus years of full-time-equivalent employment without the policy option.

c. Assumed spending began in March 2010, and no benefit payments would be made after July 2011.

d. Initial reductions in revenues would be nearly fully offset by later increases. The policy's effects were therefore estimated per dollar of the present discounted value of the policy (discounted at the businesses' cost of debt and equity) instead of per dollar of total budgetary cost.

e. Timing of spending from new funding would follow historical experience.

f. Assumed to extend, through 2011, the provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 that are scheduled to expire at the end of 2010, and to provide relief from the individual alternative minimum tax by extending the higher exemption amounts that were in effect in 2009 (indexed for inflation) for 2010 and 2011.

- The other options that CBO analyzed would have still smaller effects on the economy per dollar of budgetary cost. One option in this category is a temporary increase in investment in infrastructure. Because many infrastructure projects involve substantial start-up lags and because considerable infrastructure financing was already provided through ARRA, most of the increases in output and employment from this policy would probably occur a few years in the future. Another option in this category is extending higher exemption amounts for the AMT in 2010. That policy would have a limited impact on spending because it would largely affect households whose spending is not constrained by their income in a given year.

- The final option that CBO studied for the January report was a one-year deferral of the increase in income taxes scheduled to occur in 2011, combined with an increase in the exemption amounts for the AMT for 2010 and 2011. CBO estimated that this option would have a small effect on the economy per dollar of budgetary cost because only a fraction of such a tax cut would probably be spent. CBO focused on the effects of policy options during 2010 and 2011, and most of this tax cut would not occur until halfway through that period. If CBO updated those estimates today and examined the impact during the 2011–2012 period, a temporary across-the-board reduction in income taxes would have a larger effect per dollar of budgetary cost but would still, by that measure, by that measure, significantly trail most of the other options studied.

- A one-year deferral of all of the increases except certain provisions that apply to higher-income taxpayers would have a larger effect on the economy per dollar of budgetary cost than would a deferral of all of the increases because the higher-income households that would be excluded would probably save a larger fraction of their increase in after-tax income. However, the difference between the two options would be small, because much of the remaining tax reduction would still go to higher-income taxpayers.

Estimated Short-Term and Longer-Term Effects of Four Alternative Tax Policies

Changes in tax law related to the 2001 and 2003 tax cuts that are scheduled to expire at the end of 2010, as well as changes to provisions of the AMT that expired at the end of last year and to the estate tax, could have a significant impact on the federal budget and on the economy. In response to a request from the Chairman, CBO analyzed four possible approaches to changing those provisions of current law:

- **Full Permanent Extension.** This option would extend the provisions of EGTRRA and JGTRRA that are scheduled to expire at the end of 2010; extend the higher exemption amounts from the AMT that were in effect in 2009 and index them for inflation for 2010 and subsequent years; and reinstate the estate tax—which expired completely in 2010—for 2011 and subsequent years at the rates in effect in 2009 and with the exemption amounts (adjusted for inflation) that applied in that year, rather than at the higher rates and lower exemption amounts scheduled to take effect in 2011.

- **Partial Permanent Extension.** This option is the same as the full extension, except that it would not extend certain provisions of EGTRRA and JGTRRA that apply to married couples with income of $250,000 or more and single taxpayers with income of $200,000 or more. Those provisions include the lower tax rates in the top two income tax brackets, the lower 15 percent tax rates on capital gains and dividends, and the elimination of the phaseout of itemized deductions and personal exemptions.

- **Full Extension Through 2012.** This option would make the same changes as the full permanent extension, but through 2012 rather than permanently.

- **Partial Extension Through 2012.** This option would make the same changes as the partial permanent extension, but through 2012 rather than permanently.

To analyze how these four policy options would affect the economy, CBO used an approach very much like its method for analyzing the macroeconomic effects of the President's budgetary proposals. The agency used several models that make different simplifying assumptions about people's behavior, and, for some of the models, the agency produced estimates under alternative assumptions about the response of labor supply to changes in tax rates. Still, the effects of these policy options are quite uncertain, and the actual effects could be outside CBO's ranges of estimates. The estimates incorporate the assumption that no other tax or spending policies would be changed through 2020, although some of the estimates incorporate the effects of policy changes assumed to be made after 2020 to put fiscal policy on a sustainable path.

To estimate effects on the economy in 2011 and 2012, CBO used models that focus on the policies' effects on the demand for goods and services, because the agency thinks that weak demand will constrain economic growth in the short term. All else being equal, lower tax revenues increase demand for goods and services and thereby boost economic activity. By contrast, to estimate effects on the economy in 2020 and beyond, CBO used models that focus on the policies' effects on the supply of labor and capital, because the agency thinks that supply factors will restrain economic growth over that longer horizon. All else being equal, lower tax revenues increase budget deficits, and, in turn, the federal government's increased borrowing displaces some productive investment in the private sector; at the same time, lower tax rates increase people's saving and work effort. The net effect on economic activity and income depends on the balance of those forces.

Estimated Effects on Federal Revenues and Marginal Tax Rates

CBO estimates that a full extension of the tax provisions would reduce federal revenues as a share of gross national product (GNP) by 1.2 percent in 2011 and 1.7 percent in 2012 (see Table 2).[22,23] A partial extension would reduce revenues by about one-fifth to one-quarter less, CBO estimates—by 0.9 percent of GNP in 2011 and 1.4 percent in 2012. If the extension of the tax provisions continued through 2020, the full extension would reduce revenues by 2.1 percent of GNP in that year, and the partial extension would reduce them by 1.6 percent of GNP.[24]

Extending the expiring tax provisions would reduce the marginal federal tax rates (the rates that would apply to the last dollar of income subject to taxes) on both capital income and labor income, by keeping in place lower individual income tax rates on ordinary income, dividends, and capital gains. Under current law, the 25 percent, 28 percent, and 33 percent income tax rates would all rise by 3 percentage points in 2011, and the top tax rate would rise from 35 percent to 39.6 percent. The current maximum 15 percent tax rate on dividends and long-term capital gains would also rise. Under current law, the tax rate on long-term capital gains would increase to 20 percent in 2011, and dividends would be taxed at the same rates as other income.

The full extension would reduce the effective marginal tax rate on capital income by 2.0 percentage points in 2011 and by 2.3 percentage points in 2020, CBO

22. GNP measures the total market value of goods and services produced during a given period by labor and capital supplied by residents of the United States, regardless of where the labor and capital are located. That value is conceptually equal to the total income accruing to residents of the country during that period (national income) and thus, compared with gross domestic product (GDP), is a better measure of the well-being of U.S. residents. GNP differs from GDP primarily by including the capital income that residents earn from investments abroad and excluding the capital income that nonresidents earn from domestic investment.

23. The revenue estimates are based on preliminary estimates provided by the staff of the Joint Committee on Taxation. The estimates include the effects of increased outlays for refundable credits and do not incorporate any impact that the policy options might have on GNP or other broad measures of economic activity.

24. Under CBO's baseline projections, which incorporate the assumption that current tax law continues in effect, federal revenues in 2020 would amount to about 21 percent of GNP.

Table 2.

Effects of Four Tax Policy Options on Federal Revenues and Marginal Tax Rates, 2011, 2012, and 2020

	Impact on Revenues[a] (Percentage of Gross National Product)	Impact on Effective Federal Marginal Tax Rate on Capital Income[b] (Percentage points)	Impact on Effective Federal Marginal Tax Rate on Labor Income[c] (Percentage points)
		2011	
Full Extension, Permanent[d]	-1.2	-2.0	-2.6
Partial Extension, Permanent[e]	-0.9	-0.4	-2.0
Full Extension, Through 2012[f]	-1.2	-2.0	-2.6
Partial Extension, Through 2012[g]	-0.9	-0.4	-2.0
		2012	
Full Extension, Permanent[d]	-1.7	-2.1	-2.7
Partial Extension, Permanent[e]	-1.4	-0.4	-2.0
Full Extension, Through 2012[f]	-1.7	-2.1	-2.7
Partial Extension, Through 2012[g]	-1.4	-0.4	-2.0
		2020	
Full Extension, Permanent[d]	-2.1	-2.3	-3.0
Partial Extension, Permanent[e]	-1.6	-0.4	-2.1
Full Extension, Through 2012[f]	*	0	0
Partial Extension, Through 2012[g]	*	0	0

Source: Congressional Budget Office.

Note: * = less than 0.1 percentage point.

a. Estimated as revenues with the policy in effect minus revenues without the policy. The impact on outlays for refundable tax credits is included.

b. The difference relative to current law in the rate applicable to the last dollar of capital income subject to federal individual income and corporate income taxes.

c. The difference relative to current law in the rate applicable to the last dollar of labor income subject to federal individual income and payroll taxes.

d. This option would extend the provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 that are scheduled to expire at the end of 2010; extend the higher exemption amounts from the individual alternative minimum tax that were in effect in 2009 (adjusted for inflation) for 2010 and subsequent years; and reinstate the estate tax—which expired completely in 2010—for 2011 and subsequent years at the rates in effect in 2009 and with the exemption amounts (adjusted for inflation) that applied in that year.

e. This option is the same as the full extension, except that certain provisions would expire that would otherwise have applied to married couples with income of $250,000 or more and single taxpayers with income of $200,000 or more. Those provisions include the lower tax rates in the top two income tax brackets, the lower 15 percent tax rates on capital gains and dividends, and the elimination of the phaseout of itemized deductions and personal exemptions.

f. This option would make the same changes as the full extension, but through 2012 rather than permanently.

g. This option would make the same changes as the partial extension, but through 2012 rather than permanently.

estimates.[25] The partial extension would have a much smaller effect, reducing that tax rate by an estimated 0.4 percentage points in both 2011 and 2020. The effect is smaller because of the disproportionate share of capital income accruing to high-income households, who would not see a decline in marginal tax rates under the partial extension.

The full extension would reduce the effective marginal tax rate on labor income by 2.6 percentage points in 2011 and by 3.0 percentage points in 2020, CBO estimates; the partial extension would reduce those rates by an estimated 2.0 percentage points in 2011 and 2.1 percentage points in 2020. The projected effects on the effective marginal tax rate are greater for labor income than capital income because a substantial amount of capital income is not taxed under the individual income tax. For example, capital income in the form of implicit rent on owner-occupied homes and capital income earned from tax-preferred retirement accounts are not subject to income taxes.

Estimated Economic Effects in 2011 and 2012

For 2011 and 2012, CBO's estimates of effects on GDP incorporate both supply-side effects (influences on the economy's potential output; that is, the amount of production that corresponds to a high level of resource use) and demand-side effects (temporary movements of actual output relative to potential output). However, the estimated economic effects depend predominantly on the demand-side effects because CBO projects that actual output will fall well short of potential output during the next two years. CBO analyzed the effects of the policies on total income (as measured by real GNP), the unemployment rate, employment, and full-time-equivalent employment.

According to CBO's estimates, all four policy options would add to income and employment in 2011 and 2012, largely because they would increase after-tax income and thereby encourage people to spend more. In 2011, for example, by CBO's estimates, the partial extension of the tax cuts through 2012 would increase real GNP by between 0.2 percent and 0.7 percent, reduce the unemployment rate by between 0.1 and 0.3 percentage points, and add between 0.3 million and 0.7 million full-time-equivalent jobs (see Table 3).

The full extension of the tax cuts through 2012 would increase GDP and employment more in 2011 and 2012 than would the partial extension through 2012 because it would have a greater overall impact on after-tax income. However, the economic impact per dollar of revenue reduction from the full extension would be smaller than that from partial extension because a greater proportion of the tax savings from the

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25. The effective marginal tax rate on capital income is the rate that would apply to the return on additional investment. That rate is averaged across all the businesses, people, and institutions that would receive that investment income (and that could face different tax rates). For a description of CBO's method for estimating effective tax rates, see Congressional Budget Office, *Computing Effective Tax Rates on Capital Income*, Background Paper (December 2006).

Table 3.

Effects of Four Tax Policy Options on Macroeconomic Outcomes in 2011 and 2012

	Real GNP[a] (Percent)		Unemployment Rate[b] (Percentage points)		Employment[c] (Millions)		Full-Time-Equivalent Employment[d] (Millions)	
	Low Estimate	High Estimate	Low Estimate	High Estimate	Low Estimate	High Estimate	Low Estimate	High Estimate
				2011				
Full Extension, Permanent	0.5	1.4	-0.2	-0.5	0.4	1.0	0.6	1.4
Partial Extension, Permanent	0.4	1.1	-0.2	-0.4	0.3	0.8	0.5	1.2
Full Extension, Through 2012	0.3	0.9	-0.1	-0.3	0.2	0.6	0.3	0.9
Partial Extension, Through 2012	0.2	0.7	-0.1	-0.3	0.2	0.5	0.3	0.7
				2012				
Full Extension, Permanent	0.6	1.9	-0.3	-1.0	0.7	1.9	0.9	2.7
Partial Extension, Permanent	0.5	1.5	-0.3	-0.8	0.5	1.6	0.8	2.3
Full Extension, Through 2012	0.3	1.1	-0.2	-0.6	0.3	1.1	0.5	1.7
Partial Extension, Through 2012	0.3	0.9	-0.2	-0.5	0.3	1.0	0.4	1.4

Source: Congressional Budget Office.

Notes: For a description of the tax policy options, see the notes to Table 2.

Different elements of tax policy options would have different effects on economic output per dollar of change in tax revenues. CBO grouped the provisions of the tax policies into general categories. For each category, CBO judgmentally chose low and high estimates of the effects on economic output per dollar of changes in tax revenues. Multiplying estimates of those per-dollar effects by the change in tax revenues from each element of a tax policy yields low and high estimates of the policy's total impact on output. CBO combined those estimates with projections of how changes in output affect participation in the labor force and the unemployment rate to produce estimates of effects on employment, hours per employed worker, and full-time-equivalent employment.

a. Estimated as gross national product adjusted for inflation (real GNP) with the policy option in effect relative to real GNP without the policy option.

b. Estimated as the unemployment rate with the policy option in effect minus the unemployment rate without the policy option.

c. Estimated as the number of people who work for pay with the policy option in effect minus the number without the policy option.

d. Estimated as full-time-equivalent employment (40 hours of employment per week for one year) with the policy option in effect minus full-time-equivalent employment without the policy option.

full extension would go to relatively high income households, which tend to spend less of an increase in income than lower-income households do.

The full permanent extension and partial permanent extension of the tax cuts would have larger economic effects in the next two years than would the corresponding extensions through 2012 because people tend to spend a larger portion of permanent changes in after-tax income than of temporary changes.[26] However, the economic effects in the next two years, per dollar of revenue reduction over the long run, would be smaller than those of the corresponding temporary extensions because the revenue loss would continue for many more years.

Estimated Economic Effects in 2020 and Later Years

For 2020 and later years, CBO's estimates incorporate only supply-side effects, because the magnitude of demand-side effects depends on the state of the economy, which is especially difficult to predict over longer horizons. In addition, the Federal Reserve would probably offset much of the demand-side effects of policies that are foreseen well in advance in order to maintain economic stability. Because changes in unemployment caused by fiscal policy changes come largely from those policies' effects on demand, CBO did not estimate effects on unemployment in 2020 and beyond.

CBO used two different models (described more fully in the appendix) to project the economic effects of the alternative tax policies in 2020. One is a "textbook" growth model, an enhanced version of a model developed by economist Robert Solow. The other is a life-cycle growth model, which is designed to capture supply-side effects in a relatively complete and consistent way and to capture the fact that people make decisions based not only on their current circumstances but also on their expectations of future economic conditions. Among the crucial expectations are those for fiscal policy. The model imposes the common-sense rule that people believe that increases in debt arising from spending increases and tax cuts must eventually be paid for by spending cuts, tax increases, or some combination of the two. Therefore, an assumption is required about how increased deficits in the near term will be made up in later years. CBO applied two different assumptions about what people would expect—that government spending would be reduced after 2020, or that tax rates would be raised after

26. In *The Budget and Economic Outlook: An Update* (August 2010), CBO described what its economic forecast would be if, instead of the current law that CBO must assume for its baseline, the Congress followed an alternative fiscal policy similar to what many private forecasters assume. A principal element of that alternative policy was a partial permanent extension of the tax cuts as proposed in the President's 2011 budget. The estimated effects of a partial permanent extension reported here differ somewhat from the estimated effects reported in the *Update* both because the policy considered here is a little different and because the effects are reported here on an annual-average basis rather than on a fourth-quarter-to-fourth-quarter basis as in the *Update*.

2020.[27] Because of the forward-looking nature of people's decisions in that model, those different assumptions lead to different projected outcomes in 2020 (and earlier).

A key assumption in both of the models is the responsiveness of labor supply to changes in after-tax compensation from employment. Because researchers are uncertain about the magnitude of this responsiveness, CBO estimated the effects of the tax policy options using two different assumptions, incorporating one of the lower estimates and one of the higher estimates in the research literature.[28]

By CBO's estimates, the partial extension of the tax cuts through 2012 would reduce real GNP in 2020 by between 0.2 percent and 0.3 percent relative to what would otherwise occur, depending on the model and assumptions used (see Table 4). The full extension of the tax cuts through 2012 would have a slightly larger negative effect of about 0.3 percent. Those projected reductions in GNP occur primarily because the negative effect on GNP of the crowding out of investment resulting from extra government borrowing outweighs the positive effect on GNP of extra labor supply and saving resulting from the lower tax rates during the next two years.[29]

The partial permanent extension of the tax cuts would have a larger negative effect on real GNP in 2020, reducing it by between 0.9 percent and 1.8 percent, depending on the model and assumptions. The reduction in GNP is larger for this policy than for the partial extension through 2012 because the additional government borrowing would diminish income by more than the persistence of lower tax rates would raise it. The reduction in GNP in 2020 is less pronounced when tax rates are assumed to increase after 2020 than when government spending is assumed to decrease after 2020, because the anticipation of an increase in tax rates would lead people to work more in the years up to and including 2020. Greater responsiveness of labor supply to changes in after-tax compensation from employment has an ambiguous impact on the effects of tax reductions on labor supply and GNP because the boost to labor supply from lower tax rates is offset at least in part by the reduction in labor supply from lower pretax compensation due to the crowding out of investment. In cases in which the fall in pretax compensation outweighs the cut in tax rates, greater responsiveness

27. Other assumptions are possible. For example, if tax revenues were increased through broadening the calculation of taxable income for the individual income tax rather than raising the rates at which that income is taxed, then the estimated effects of the policy would more closely resemble the estimated effects of cutting government spending. Alternatively, if the reduction in government spending was concentrated only in purchases of goods and services or only in transfer payments, then the estimated effects of the policy would be different.

28. For a review of the estimates in the research literature and for an explanation of the labor supply response in the life-cycle model that CBO uses, see Juan Contreras and Sven Sinclair, "The Labor Supply Response in Macroeconomic Models," CBO Working Paper 2008-07 (September 2008).

29. In contrast with the analysis presented here, the analysis of different budgetary policies presented in CBO's *The Long-Term Budget Outlook* (June 2010, revised August 2010) did not incorporate the effects on labor supply of changes in marginal tax rates on labor income or the effects on saving of changes in marginal tax rates on capital income.

Table 4.

Effects of Four Tax Policy Options on Real GNP in 2020 and the Long Term

(Percent)

	Effects Without Additional Policy Changes[a]		Effects with Additional Policy Changes Needed to Put Fiscal Policy on a Sustainable Path[b]: Government Spending Reduced After 2020		Effects with Additional Policy Changes Needed to Put Fiscal Policy on a Sustainable Path[b]: Tax Rates Increased After 2020	
	Weak Labor Response	Strong Labor Response	Weak Labor Response	Strong Labor Response	Weak Labor Response	Strong Labor Response
2020						
Full Extension, Permanent	-1.6	-1.1	-1.4	-0.9	-0.8	0.1
Partial Extension, Permanent	-1.3	-0.9	-1.6	-1.8	-1.1	-0.9
Full Extension, Through 2012	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Partial Extension, Through 2012	-0.3	-0.3	-0.2	-0.3	-0.2	-0.3
Long Term[c]						
Full Extension, Permanent	n.a.	n.a.	-2.9	-2.3	-8.4	-10.5
Partial Extension, Permanent	n.a.	n.a.	-2.9	-3.5	-7.8	-11.2
Full Extension, Through 2012	n.a.	n.a.	-0.6	-0.6	-0.7	-0.8
Partial Extension, Through 2012	n.a.	n.a.	-0.5	-0.6	-0.6	-0.7

Source: Congressional Budget Office.

Notes: Estimated as gross national product adjusted for inflation (real GNP) with the policy option in effect relative to real GNP without the policy option. Weak and strong labor responses correspond to the respective number of hours worked when the response to tax rate changes is weak and when it is strong. For a description of the tax policy options, see the notes to Table 2.

n.a. = not available; these estimates were not calculated for this analysis.

a. Based on a "textbook" growth model, which is an enhanced version of a model developed by Robert Solow.

b. Based on a life-cycle growth model, developed by CBO, which is an overlapping-generations general-equilibrium model in which people are forward-looking in their behavior. Because the U.S. economy is open to flows of foreign capital, but also large enough to influence world interest rates and wage rates, the results reported for this model are an average of results using assumptions of a closed economy and a small open economy. For this model, CBO had to make assumptions about how fiscal policy would be put on a sustainable path. CBO chose two alternatives: reducing government purchases of goods and services and transfer payments after 2020, and increasing marginal tax rates after 2020.

c. Based on estimates for 2040.

implies a larger decrease in output rather than a smaller one; in this analysis, that occurs under the assumption that government spending is reduced after 2020.

The estimated effect of the full permanent extension of the tax cuts on GNP in 2020 varies substantially—ranging from a reduction of 1.6 percent to an increase of 0.1 percent—depending on the model and assumptions used. In results from the textbook growth model, the effect is more negative than that of the partial permanent extension because the greater government borrowing diminishes income by more than the existence of lower tax rates for more workers and savers raises it. In contrast, in results from the life-cycle growth model, the effect is less negative than for the partial permanent extension (or is positive) in large part because the greater reduction in tax rates has a larger effect on labor supply and saving than the additional crowding out from the larger deficits. In addition, as under the partial permanent extension, people would work more in the years up to and including 2020 in anticipation of the increase in future tax rates.

Estimates using the life-cycle growth model show that all four tax policy options would reduce GNP in the long term relative to what would otherwise occur (for all of the assumptions used in the analysis). Those negative effects would stem from the reduced capital stock and from the impact of the policy changes that are assumed to take place after 2020 to put fiscal policy on a sustainable path. The permanent extensions of the tax cuts would have much larger negative effects in the long term than the temporary extensions because the amount of additional government debt would be so much larger. CBO did not complete estimates beyond 2020 using the textbook growth model. However, such estimates would show larger negative effects on GNP beyond 2020 than in 2020—especially for the permanent extensions—because the additional government debt would compound over time, and the extent of crowding out would increase.

The estimated effects from the life-cycle model depend importantly on when further policy changes to put fiscal policy on a sustainable path are assumed to be made. For example, if subsequent cuts in government spending or increases in tax rates were made sooner than 2020, the permanent extensions would reduce GNP by more in 2020 but less in the long term.

Appendix:
Additional Information on the Estimated Effects of the Four Alternative Tax Policies

The four tax policy options that the Congressional Budget Office (CBO) examined would influence the economy through both demand and supply effects.[1] By reducing taxes relative to CBO's baseline projections, all four options would generate demand-side effects that would raise output relative to what would otherwise occur in 2011 and 2012. In particular, lower tax payments imply that disposable income would increase, encouraging consumers' demand for goods and services.

The options would also generate supply-side effects that would help determine the course of potential economic output. The supply-side effects of the options would arise primarily from two factors:

- The policies would result in a smaller stock of domestically owned capital, mainly as a consequence of increased budget deficits relative to those projected under current law. That effect is larger when the impact of the policy on the deficit is greater, and it becomes stronger over time as budget deficits accumulate. Therefore, full extensions of the tax cuts would have larger negative effects on the capital stock than partial extensions, and permanent extensions would have larger negative effects than extensions through 2012.

- While the policies are in effect, they would result in an increase in the supply of labor and saving by reducing the effective marginal tax rates on labor and saving. Those reductions, and therefore the positive impact on labor supply and saving, would be larger for full extensions than partial extensions and would last longer for permanent extensions than for extensions through 2012.

How the Policies Would Affect the Economy

The alternative tax policies would influence the size of the nation's capital stock by affecting national saving, which consists of private saving (saving by households and businesses) plus public saving (the budget surpluses or deficits—which represent dissaving—of state and local governments and the federal government). An increase in

1. For a similar discussion of CBO's approach to estimating the macroeconomic effects of the President's budgetary proposals, see Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2011* (March 2010), Chapter 2 and Appendix B.

the federal deficit represents a reduction in public saving and, therefore, in national saving. Federal policies also can affect private saving; increases in private saving raise national saving, and decreases diminish national saving. A decline in national saving reduces the capital stock owned by U.S. citizens over time through a decrease in domestic investment, an increase in net borrowing from abroad, or both.

The policy options' largest consequences for national saving would come from their effects on the federal budget deficit. Each year between 2011 and 2020, the options would expand the federal deficit relative to that in CBO's baseline, which would reduce national saving, other things being equal.

Extending the tax cuts would also influence the size of the nation's capital stock by altering effective marginal tax rates on capital income (income derived from wealth, such as stock dividends, realized capital gains, or the owner's profits from a business) and thus the after-tax rate of return on saving and the amount of saving that people chose to do.[2] CBO's estimates of marginal tax rates reflect both corporate and individual income taxes.[3]

The reduction in the effective marginal tax rate on capital income would result primarily from the extension of lower income tax rates and the maximum 15 percent tax rate on dividends and capital gains. Under current law, for example, the top tax rate would rise from 35 percent to 39.6 percent, the top tax rate on capital gains would rise to 20 percent, and dividends would be taxed at the same rates as other income. The decrease in the tax rate on capital income relative to the rate prevailing under current law could have larger or smaller effects on private saving depending on how people responded.[4] However, even the upper end of reasonable estimates for the responsiveness of saving would imply relatively small consequences for the capital stock and output of the economy if the extension of the lower rates was limited to two years. Extending the tax cuts except for provisions applying to higher-income taxpayers would have a much smaller effect on the marginal effective tax rate on capital because a disproportionate share of capital income accrues to high-income households.

2. The effective marginal tax rate on capital income is the rate that would apply to the return on additional investment. That rate is averaged across all the businesses, people, and institutions that would receive that investment income (and that could face different tax rates).

3. For a description of CBO's method for estimating effective tax rates, see Congressional Budget Office, *Computing Effective Tax Rates on Capital Income,* Background Paper (December 2006).

4. By increasing the after-tax return on saving, the tax policy options would influence private saving in two opposing ways: Higher after-tax returns would tend to increase saving and thus reduce consumer spending, but they also would boost the value of existing assets, making households wealthier and thus tending to encourage spending. On balance, the combined effect on spending of higher after-tax returns can be positive or negative, and researchers generally conclude that the effect is small. CBO's models incorporate different assumptions about how households might respond to changes in the after-tax return on saving.

Potential output is strongly tied to the amount and quality of labor supplied in the economy. A sustained long-term increase in total hours worked or in the capability of the labor force improves the economy's potential to generate output. CBO's analysis focused on channels through which the policy options could affect the number of hours of labor supplied because the evidence for those channels is stronger than is the evidence for channels through which government policies can affect the quality of labor.

Extending the tax provisions could affect the quantity of labor in two main ways. First, extending some of the provisions would change people's overall after-tax income but not their after-tax compensation for each additional hour of work. In the absence of a change in marginal rates, an increase in after-tax income tends to reduce the number of hours of labor supplied because people can maintain their standard of living with less work; conversely, a decline in income tends to increase the hours supplied.

Second, some provisions would change both after-tax income and after-tax compensation for each additional hour of work. For example, the extension of the lower marginal tax rates on income that were enacted in 2001 would increase both after-tax income and after-tax compensation per hour. Provisions that raised after-tax income and incremental after-tax compensation (and provisions that reduced both) would have opposing effects on people's incentives. In the case of extending lower tax rates, for example, the affected workers would be encouraged to work longer hours because they would earn more for each extra hour of labor they supplied. But a disincentive also exists: Those same workers would earn more after-tax income at their current working hours, which would encourage them to decrease their work hours.

For many people, the opposing incentives from reducing marginal tax rates largely offset each other, although most economists conclude that, on average, the positive effects of greater after-tax earnings for each additional hour worked slightly outweigh the negative effects of higher after-tax income from current working hours. Responses to changes in tax rates can also vary among family members, with secondary earners (for example, the spouse of a household's primary breadwinner) generally responding to a greater extent than primary earners.[5] All told, CBO assumes that reductions in marginal tax rates will tend to increase modestly the hours of labor that workers supply, and increases in marginal tax rates will modestly decrease hours worked.

5. See Congressional Budget Office, *Labor Supply and Taxes,* CBO Memorandum (January 1996). Since that memorandum was published, CBO has revised downward its estimates of total wage elasticity and substitution elasticity for secondary earners because of evidence that their responsiveness has declined over time as their participation in the labor force has grown. (The highest-earning member of each household is the primary earner; other household members with earnings are secondary earners.) See also Congressional Budget Office, *The Effect of Tax Changes on Labor Supply in CBO's Microsimulation Tax Model,* Background Paper (April 2007); and Francine D. Blau and Lawrence M. Kahn, "Changes in the Labor Supply Behavior of Married Women: 1980–2000," *Journal of Labor Economics,* vol. 25, no. 3 (2007), pp. 393–438.

The policy options would affect labor supply not only by affecting tax rates on labor income, but also through their impact on the capital stock. Because higher deficits would crowd out capital, pretax wage rates would be lower than those under current law (all else being equal), weakening people's incentives to work.

Quantifying the Short-Term Effects of the Policies

CBO used a set of models to estimate the effects of the policy options relative to current law. The estimated effects for 2011 and 2012 depend primarily on an analysis of demand-side impacts, although the estimates incorporate some supply-side influences as well. Specifically, CBO analyzed the effects of the policy options in 2011 and 2012 using macroeconometric forecasting models and historical relationships to determine estimated "multipliers" for each of the provisions. Each multiplier represents the effects on the nation's output of a dollar's worth of a given provision. A provision's multiplier can be applied to the budgetary cost of that provision to estimate its overall impact on output.

A policy's direct effects on the nation's output consist of immediate (or first-round) effects on economic activity. The size of the direct effects depends on the policy's impact on the behavior of recipients. If someone receives a tax reduction of a dollar and spends 80 cents (saving the other 20 cents), production increases over time to meet the additional demand generated by that spending, and the direct impact on output is 80 cents.

CBO reviewed evidence on the responses of households to various types of tax cuts to estimate the size of the provisions' direct effects on output.[6] For example, temporary tax cuts will generally have less impact on a household's purchases than permanent cuts because a temporary cut has a smaller effect on total lifetime disposable income. As another example, increases in disposable income are likely to boost purchases more for lower-income than for higher-income households. That difference arises, at least in part, because a larger share of people in lower-income households cannot borrow as much money as they would wish in order to spend more than they do currently.

Tax reductions also can have indirect effects that enhance or offset the direct effects. For example, direct effects are enhanced when greater demand for goods and services prompts companies to increase investment to bolster their future production. In the other direction, direct effects are muted if increases in interest rates in response to the

6. On household spending, for example, see Jonathan A. Parker and others, *Consumer Spending and the Economic Stimulus Payments of 2008* (working paper, Northwestern University, February 2010), www.kellogg.northwestern.edu/faculty/parker/htm/research/PSJM2010.pdf; Matthew D. Shapiro and Joel Slemrod, "Did the 2008 Tax Rebates Stimulate Spending?" *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 374–379; Sumit Agarwal, Chunlin Liu, and Nicholas S. Souleles, "The Reaction of Consumer Spending and Debt to Tax Rebates: Evidence from Consumer Credit Data," *Journal of Political Economy*, vol. 115, no. 6 (December 2007), pp. 986–1019; and David S. Johnson, Jonathan A. Parker, and Nicholas S. Souleles, "Household Expenditure and the Income Tax Rebates of 2001," *American Economic Review*, vol. 96, no. 5 (December 2006), pp. 1589–1610.

tax cuts and associated government borrowing discourage spending by households and businesses. In estimating the magnitude of indirect effects, CBO relied heavily on estimates from macroeconometric forecasting models, informed by evidence from other types of models and from direct estimation using historical data.[7]

The estimates of policy effects on output were translated into estimates of the effects on the unemployment rate, total employment, and full-time-equivalent employment in a series of steps. First, the impact on the output gap—the percentage difference between actual and potential output—was calculated.[8] Next, the effect of the change in the output gap on the unemployment rate was estimated using the historical relationship between those two measures.[9] Then, the effect of changes in the unemployment rate on the labor force was taken into account: If unemployment declines and the economic environment improves, discouraged workers and people who have chosen to pursue activities such as education rather than work will tend to return to the labor force. Together, the estimated effect on the unemployment rate and the effect on the labor force were used to estimate the impact on the number of people employed. The change in full-time-equivalent employment was then estimated using the historical relationship between changes in hours per employed worker and changes in the gap between the unemployment rate and CBO's estimate of the natural rate of unemployment.[10]

A key disadvantage of the model-based approach used in this analysis is the considerable degree of uncertainty about many of the economic relationships that are important in the modeling. Because economists differ on which analytical approaches provide the most convincing evidence about such relationships, they can reach different conclusions about them. In addition, each study involves uncertainty about the extent to which the results reflect the true effects of a given policy or the effects of other factors. For those reasons, CBO provides ranges of estimates of each policy's effects.

Quantifying the Longer-Term Effects of the Policies

CBO's estimated effects for 2020 and later years incorporate supply-side effects only. The economic models used in the longer-term analysis represent people's economic decisions in a simplified way that does not capture all aspects of actual behavior. Even

7. For more details about those sources of information, see Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output From April 2010 Through June 2010* (August 2010), Appendix.

8. Potential output is the level of production that corresponds to a high rate of use of labor and capital.

9. Changes in the output gap affect unemployment gradually over several quarters. Initially, part of a rise in output shows up as higher productivity and hours per worker rather than as reduced unemployment.

10. The natural rate of unemployment is the rate that arises from all sources except cyclical fluctuations in economywide demand for goods and services.

so, the results provide a reasonable range of estimated responses to changes in policy. CBO used two growth models to analyze the effects of the policy options in 2020.[11] The models—a textbook growth model and a life-cycle growth model—differ in their assumptions about whether people look to the future in making plans and in the ways the models capture people's responses to changes in marginal tax rates.

Textbook Growth Model

The textbook growth model assumes, in effect, that people do not consider expected future policies when they make economic decisions. CBO used the textbook growth model to estimate effects under two assumptions about how much people would adjust their work hours in response to changes in marginal tax rates: a "strong labor response" assumption, under which workers' response is on the high side of the consensus range of empirical estimates from studies based on one-year changes in labor supply, and a "weak labor response" assumption, under which workers respond very little.[12]

Life-Cycle Growth Model

In contrast to the textbook growth model, the life-cycle model is built on the assumption that people adjust their decisions about work and saving in response to current changes in marginal tax rates, government transfer payments, and after-tax rates of return—and in anticipation of future changes in those factors. In particular, the life-cycle model incorporates the assumption that people make lifelong plans for work and saving. Moreover, the life-cycle model assumes that people know with certainty how the government will resolve its long-term budget imbalance, whether by raising tax rates, cutting spending, or implementing some combination of the two. The life-cycle model also assumes that households face uncertainty about future wages and could become credit constrained (that is, unable to borrow to maintain their spending) if their wages declined significantly.[13]

The forward-looking characteristics of the life-cycle model necessitate assumptions about what people believe will happen in the future, not only during the 10-year projection period of CBO's baseline but into the indefinite future as well. For its analysis, CBO assumed that people believe that the policies being assessed—those of the policy

11. Growth models are often called supply-side models. They assume that the labor market is always in equilibrium and thus that overall fiscal policy has no effect on the unemployment rate.

12. CBO's estimates used data from a large sample of taxpayers to account for the effects of changes in marginal tax rates and in after-tax income under the policy options. The models incorporated a larger response to changes in marginal tax rates among secondary earners than among primary earners.

13. The incorporation of uncertainty and credit constraints has an important effect on the results from this model: Unlike models that are similar in other respects but assume certainty and no constraints on borrowing, this model produces effects on people's behavior of increases in disposable income from government policies, even if people expect the policies to be fully offset in the future.

options or of CBO's baseline—will be maintained through 2020. In reality, people may well believe that the policies might change at some point during that time.

For the years after 2020, however, the policies that are analyzed here are unsustainable.[14] Therefore, CBO made two assumptions about the manner in which the reduction in revenues under the alternative tax policies would eventually be reflected in taxes and spending. Under one assumption, people believe that the initial tax reductions will be financed by gradually adjusting government spending for goods and services and for transfer payments over the period from 2021 to 2030. Under the other assumption, people believe that the initial tax reductions will be financed by gradually adjusting marginal tax rates over the same period. In addition, as in the case of the textbook growth model, the life-cycle model's estimates incorporate assumptions about the "strong" or "weak" responsiveness of labor supply to changes in marginal tax rates. Thus, for each policy option, the life-cycle model produced four estimates of economic effects, combining different assumptions about future changes in policy and about the responsiveness of labor supply.[15]

14. See Congressional Budget Office, *The Long-Term Budget Outlook* (June 2010, Revised August 2010).

15. In the past, CBO has also presented results from the life-cycle model based on the assumption that interest rates and wages in the United States are completely determined by the rest of the world (an "open economy" assumption) or that domestic interest rates and wages are unaffected by the rest of the world (a "closed economy" assumption). The estimates in this analysis average the results of those two assumptions to produce an intermediate result.

Chairman CONRAD. Thank you very much.

Let me go first to the question of "bang for the buck." In terms of economic policies we might enact now to strengthen an economy that is too weak, your analysis shows that the largest effect would arise from a temporary increase in aid to the unemployed. The next largest effect would be a temporary reduction in employers' payroll taxes. Smaller but still significant effects would come from other policies such as temporary reduction in the employees' payroll taxes, additional one-time Social Security payments, additional temporary refundable tax credits for lower- and middle-income countries households. And going down the line, other things that would have an effect but would be still smaller would be a temporary increase in investment in infrastructure. And the final option you looked at was tax reduction, a 1-year deferral of the increase in income taxes that you also found would have a positive effect, although it would be the least bang for the buck of the options analyzed. Is that correct?

Mr. ELMENDORF. Yes, that is right, Mr. Chairman. Let me just make two quick points. One is that this analysis we did in January assumed that these policies would be enacted in early 2010. Of course, that is not possible at this point. We have not updated all of these estimates. One that would look somewhat different—actually, if this picture could go back up there on my screen, that would be helpful, whoever is controlling that.

Chairman CONRAD. Is that the slide you wanted?

Mr. ELMENDORF. Yes, that is the slide I had in mind.

If we updated the numbers now, they would change a little bit. The basic pattern would not be different. But it is true that the effect of extending the tax cuts would look a little stronger because this extension was one that actually began in 2011—in other words, 1 year into the 2-year window we were focusing on at the time—and that diminished its effect a little bit. But if we updated all these numbers, the options of extending the tax cuts would still have lower bang for the buck than almost all of the options on this list.

The other thing I just want to add, Mr. Chairman, is that it is important to recognize this is the effect per dollar of budgetary impact. As I mentioned in my remarks, if one wants to have an effect of a certain size on the economy, it also matters the scale at which these things are done. Some of these options can naturally be done at a larger scale than others, and that is a consideration for you and your colleagues as well.

Chairman CONRAD. So let us go to the question of the tax cuts because that is one of the key issues Congress will confront when we return. As I analyze the results of your work, it is that although they are pretty modest with respect to bang for the buck, extension of the tax cuts would be positive in the short term, 2011 and 2012, but actually be negative in the long term; that is, permanent extension of the tax cuts, all of them, would actually be the most negative in terms of its effect on economic growth in the long term. Is that correct?

Mr. ELMENDORF. As you know, we have not looked at all of these options over the longer term, but of the tax options that we studied, the four different ways of extending the expiring tax provisions, the permanent extensions would have the largest negative effect on national income over the longer run—the largest boost in the short run, as you said, but the largest negative effect in the long run. And that would occur because the extra Government borrowing from the significantly larger deficits would drag down income more than the extra work effort or saving that would be generated by the lower tax rates.

Chairman CONRAD. So the effect of tax cuts, which many of us associate as being positive with respect to economic growth, your conclusion is in the short term additional tax cuts, extending the tax cuts, the expiring provisions, would be positive, although the least positive of the policies that you have looked at in terms of effect on the economy, would give us the least bang for the buck, but longer term the tax cuts are actually harmful to economic growth because they are deficit financed. Is that correct?

Mr. ELMENDORF. Yes, that is correct, Mr. Chairman.

Chairman CONRAD. So that really creates a conundrum because we have two things that kind of work against each other here. On the one hand, we have got a series of policies that have been rated in terms of bang for the buck. Extending the tax cuts is among the weakest in terms of helping boost economic growth, although it is positive. So extending tax cuts would have a mildly positive effect short term, but it would have a negative effect long term because they are deficit financed, just as additional spending would help us short term but be negative long term.

Mr. ELMENDORF. Yes, that is right. The effects are really rather symmetric in that way. We have written this on a number of occasions, that the sorts of policies that lead to short-term boosts, higher Government or lower taxes, if not accompanied by other offsetting changes over time, if just allowed to increase deficits and debt over time, will have negative effects in the medium and long run.

Chairman CONRAD. Let me just say for many people it is counterintuitive that tax cuts could somehow hurt future economic growth. How is that? Why is it that in your analysis tax cuts could be actually harmful to long-term economic growth?

Mr. ELMENDORF. I think the natural intuition is people thinking about their own situations and thinking, correctly, that if their tax rates were lower, that would give them an incentive to work more, to save more, to invest more. And that is right as far as it goes. The problem is that if those tax cuts are not accompanied by other changes in the Government budget and are simply funded through borrowing, that that borrowing crowds out other private investment in productive capital in the sorts of equipment—the computers, the machinery, the buildings—that are the source of long-term economic growth. And that connection is less visible, and I think this is less apparent in most people's intuition. But it is no less important for being not so visible, for being more indirect.

Chairman CONRAD. Well, I think that is incredibly important testimony that you are giving us here today. I hope people are listening because what I hear you saying is, short term, anything we do to provide stimulus, whether it is increased spending or additional tax cuts, will give you a short-term boost; but either of them, additional spending over what is projected or additional tax cuts, will actually hurt longer-term economic growth because the impact of the deficits and debt will serve like a weight around the neck of the economic engine of this country.

Well, I thank you very much for that testimony. I hope people are paying attention.

Senator GREGG. Picking up on that point, because there is another side to the coin if you use your logic, it would be, would it not be true that spending would all have the exact same effect of crowding out economic activity if it were borrowed to spend, if you had to borrow to spend?

Mr. ELMENDORF. Yes, that is exactly right. As I said, it is symmetric.

Senator GREGG. And I do not know that you have done this analysis, but which generates more economic activity, the spending or the tax cuts?

Mr. ELMENDORF. So if you—so actually, I did not have time to show it, but there is a table in the report, which I think I have here. It is a rather complicated table. You can read along if you want, but I will try to make the points more directly.

If one looks out—the right-hand column is where we modeled the effects over time both in 2020 and beyond that, and what we have done here is we have modeled not just the effects of the initial cut in taxes, but also the policies that we needed later to put fiscal policy back on a sustainable path. It is actually required for this model. And you can see in the far right columns the changes that we assume for later to put policy back on a sustainable path, either decreases in government spending or increases in tax rates.

In the middle columns, it was a later dencrease in government spending. And, in fact, as you are suggesting Senator Gregg, the increases in tax rates have a much more negative effect on the economy over the longer term than if the budget is returned to sustainability through a reduction in government spending.

Senator GREGG. That is very important testimony.

Let me ask you another question. Your projections going forward, the size of government spending as a percent of GDP goes from what to what, starting, say, 2 years ago and working forward 10 years?

Mr. ELMENDORF. So in our latest baseline projections, government spending would be about 24 percent of GDP in 2020 compared with an average in the past 40 years that I think is closer to 20 or 21 percent of GDP. So much higher than we have experienced before in this country.

Senator GREGG. That being the case, is it not reasonable to presume that spending is the problem that is driving the debt?

Mr. ELMENDORF. Umm——

Senator GREGG. Primarily. I mean, accepting your argument that if you raise taxes, you know, we have a present tax law and you raise taxes, yes, you are going to get more revenues. But if I understood what you said, four-fifths of the tax increase or the tax revenues that are lost are not high-end people paying taxes. They are middle- income people paying taxes, correct?

Mr. ELMENDORF. So let me clarify that. Extending the top brackets is about a fifth or a quarter of the cost of extending all of it.

Senator GREGG. So——

Mr. ELMENDORF. The trick is that the people below—the tricky part is the people who are—the lower tax brackets affect the high-income people, as well.

Senator GREGG. If there is consensus—I did not mean to interrupt. If there is consensus in the Congress and the President is calling for an extension of middle-class tax cuts and the only thing that the President is calling for is the increase in the taxes of high-income individuals or people or small businesses earning more than $250,000, if that is the case, then your numbers are still 75 to 80 percent off, right? I mean, your revenues.

Mr. ELMENDORF. Yes, exactly. Extending all the tax cuts except for those affecting higher-income people has three-quarters or four-fifths, roughly, of the positive effects and the negative effects of extending all of the tax cuts.

And I want to say to your question about the problem, I do not want to use the word "problem" because it is a choice of people how big the government should be. But relative to historical experience, the thing which is different going forward is the high share of spending, due as we have written, as you know, to population aging, changes in health system and other aspects of the government budget.

Senator GREGG. Well, I think that is an important point that we need to keep in mind, that dealing with reality as it is coming at us, the government is going to go from 20 percent of GDP to 24 percent of GDP. That spending is the driver, in large part, of the gap that is causing the deficit and the debt which is going to bankrupt the country. That is how I phrase it.

Mr. ELMENDORF. Yes.

Senator GREGG. Thank you. And this debate over taxes is really, in my opinion, a bit of a straw dog debate, because as you have pointed out, 75 to 80 percent of the revenues that will not be received because we are not going to raise taxes, everybody agrees are not going to be received because everybody agrees those taxes are not going to be raised. So it really is—this whole tax debate, in my opinion, is really not what we should be focusing. We should be focusing on the growth of this government from 20 percent to 24 percent and how do we get that back under control. How do we get that into a manageable number, considering our revenue base.

I think that summarizes my points, come to think of it, and I thank you for your testimony. I also want to thank you for your professionalism, your staff's professionalism. You folks get a lot of pressure from a lot of different people, including myself, and you are always very professional and you always give us a straight answer as you see it and that is the way it should be. You are the fair umpire around here and we appreciate it. Thank you.

Mr. ELMENDORF. Senator Gregg, thank you very much, and let me just say on behalf of all of us at CBO, we very much have appreciated your support for many years for the work that we do.

Chairman CONRAD. Thank you, and Senator Wyden.

Senator WYDEN. Thank you, Mr. Chairman, and Director Elmendorf, I share Senator Gregg's view about your professionalism. We thank you.

And I want to take this tax discussion in a bit of a different direction, because right now, there is a comparison underway between the tax policies of George W. Bush and the proposals that have been offered by President Obama. And I am of the view that that tax debate misses the point because both of those approaches, George W. Bush and now what has been offered by President Obama, in my view, involve tinkering with a badly flawed, discredited tax system.

And to me, the much more relevant comparison—I want to walk you through the numbers and just get your reaction—are the numbers that you have when Ronald Reagan got together with a big group of Democrats and reformed the tax system, and compare those and what we saw in our country for job growth and economic growth, payroll growth, to what we saw during the years of George W. Bush in 2001 to 2008 and get your reaction.

Now, here are the numbers. When Ronald Reagan and Democrats worked together, 16 million new jobs were created. There was a 17.6 percent expansion in payrolls. That is when Democrats and Republicans worked together to create a tax system that was more pro-growth and more of an engine for job creation. By comparison, from 2001 to 2008, when there was just partisanship in the tax area, three million jobs were created. There was only a 2.3 percent expansion in payrolls.

Now, you have to look at the entire challenge for the American economy, and tax policies are not the only thing behind economic growth and job creation. But are not those numbers relevant with respect to this question of job growth that you saw? With tax reform, the Democrats and Republicans worked together. You certainly saw more positive numbers, numbers that were pro-growth, pro-job creation, than you saw in the years of 2001 to 2008.

Mr. ELMENDORF. So as you mentioned, Senator, there are a lot of forces affecting the economy in addition to tax policy and it is difficult to isolate the effects of tax policy. But I think you raise a very important point about the nature of the tax system matters just as much, if not more, than the level of revenue collected, and we mention that a number of places in the written testimony, that the experiments we conduct would have different results if the tax code were constructed in different ways, if the nature of the tax changes over time were different.

In particular, what is very important for the incentive effects are the marginal tax rates, and there are ways to raise revenue or lower revenue that involve changing marginal tax rates, but there are also ways that involve changing the base, the amount of income that is subject to tax at the corporate or individual level, and those are very important decisions for you and your colleagues——

Senator WYDEN. Would you agree that the fundamental model of 1986, which is what Senator Gregg and I have picked up on in our bipartisan legislation, that that model of radically simplifying the code—we have a one-page 1040 Form, 29 lines long—broadening the base and lowering rates, lowering rates for both individuals and businesses, would you agree that that model is more economically efficient than just going out and extending this vast array of loophole-ridden tax breaks that constitute the code today?

Mr. ELMENDORF. So I cannot speak to the details of your specific proposal, which I am sorry, we have not studied carefully, but I think there would be widespread agreement among analysts that a tax system with a broader base and lower tax rates would be a much more efficient way to raise revenue and thus a better way to strengthen the economy while raising revenue.

Senator WYDEN. Why would one think that the tax policies that produced anemic job growth and declining real income for the middle class—those were the policies between 2001 and 2008—why would one think that just reenacting them would create substantially more jobs and substantially more income in the pockets of middle class folks? I mean, we have what occurred. Now someone is talking about redoing it. People like Senator Gregg and I are saying, no. Why not go with a model we know worked when Democrats and Republicans get together. And my question is, why would you re-up for something that showed such anemic economic growth, job creation, payrolls between that 2001 and 2008 period?

Mr. ELMENDORF. So as you know, Senator, I am not in a position to re-up or not re-up any policy, but——

Senator WYDEN. I am just talking about the analysis.

Mr. ELMENDORF. In our analysis, the only distinction I would make is between the short-run effects and longer-run effects. In the short-run, the principal effect of tax changes on the economy is likely to be through the additional income that households would receive. But over time, in the medium-run and long-run, the most important effect of tax policy is likely to be not just the changes in total revenue, but also the changes in incentives, and our modeling reflects that. And I think the points that you were making about the proposal that you put forward are focused principally on the medium- and longer-run effects of tax policy and economic growth.

Senator WYDEN. Let me ask you about the international economic challenge and the tax law as it relates again to job creation. When you talk to American businesses, they say they have to have this array of breaks for going overseas, because the United States has a high, comparatively, tax rate to other countries with respect to the business rate. So along came these various breaks, deferral and others, the American people do not understand.

What Senator Gregg and I did is, in effect, go to American business and say, how much would you have to reduce these American rates in order to junk a lot of the stuff that you have overseas? So we came in with a rate of about 24 percent, significantly lowering the corporate rate. But it is paid for. Every single dime of it is paid for in our tax reform bill, because we, in effect, take away those overseas breaks to use it to strengthen American manufacturing.

Would not that, again, just apart from our bill, and in theory, would not that particular change make it more attractive to grow businesses and generate job growth in the United States?

Mr. ELMENDORF. Yes, Senator. I think most analysts would agree that broadening the corporate tax base and lowering the tax rate would be a more efficient way to raise that revenue.

Senator WYDEN. Thank you, Mr. Chairman. My time is up. I would also ask, Mr. Chairman, to put into the record several studies that have been very supportive of the bipartisan tax reform bill, particularly that done by the Manufacturing Alliance, the Brookings Association, and the Heritage Foundation. They would just be short summaries, if we could put that in.

Chairman CONRAD. Yes, without objection. I also want to commend you and Senator Gregg for coming up with really a very thoughtful tax reform proposal.

Let me just say, just quickly, if I could, Senator Ensign, it is very clear we are going to have to cut spending as a share of the economy. It is also clear to me we cannot afford to make permanent all of the tax cuts that are currently in the code, which kind of jumps out at you that what we need is tax reform. The tax code is now 7,500 pages long, and it was never designed with competitiveness in mind. The world has changed since that tax code was written. And if we do not write a new tax code that relates to the reality we confront today, that we are in a fully competitive global environment, and we write a tax code with that in mind, I think we are making a profound mistake. Just to double-down on this current tax code is just a huge mistake.

Senator Ensign, I thank you for your courtesy.

Senator ENSIGN. Thank you, Mr. Chairman. I want to associate myself with the remarks that Senator Wyden just talked about. There is no question that some of the economic effects of our tax code are just complying with the tax code. It is a huge burden on individuals as well as businesses in complying with our tax code. Just look at the estate tax, death tax, whatever you want to talk about. There are many complexities of trying to avoid taxes, the huge costs. Businesses make investments based on the tax code instead of what necessarily makes good economic sense, and so there is no question. I believe very strongly that the best thing that we could do is what you just talked about, Mr. Elmendorf, and that is broadening the base and lowering the tax rates. I think that it is absolutely the best way to go.

I do want to pick up on something that you said a little while ago. You said that if we lower tax rates, in one of your charts, over the next couple of years, it will increase GDP. Is the opposite true? If we raise taxes over the next couple of years—if we raise—in other words, if we let the tax rates that are on the books currently expire, will GDP go down?

Mr. ELMENDORF. Well, so our economic baseline, as you know, has to be conditioned on current law. So our economic forecast assumes that those tax cuts expire, and relative to that, an extension—so it is relative to that that we have done our estimates. Relative to that, an extension of the tax cuts would, in fact, boost GDP and would boost employment. Conversely, if one pictured starting from that point, then having the tax cuts expire would lower GDP. I just want to be clear that that effect is essentially in our economic forecast——

Senator ENSIGN. Right, but it does make sense that raising taxes will decrease the GDP? In other words, if taxes go up, there is no question that GDP will go down versus keeping those tax rates where they are today.

Mr. ELMENDORF. Yes. Over the next few years, that is the short-term effects——

Senator ENSIGN. Yes. I think that is important. And I also—I think some of the analysis that you have done as far as the long-term is very, very important, and like you said, it is not just the tax cuts, the spending, both of those things. I agree with you. I think if we are going to do these tax cuts, we should actually be looking at ways to cut spending, because it is not just the short-term economy that we need to think about here. We need to be responsible in the long-term, and while ideally doing what Senator Wyden is talking about, to me, that would be the best way to do it, and if we could lower the rates low enough and do that, paying for it through lowering spending, in the long run, we are going to be better off as an economy, as a country. Obviously, those are tough choices to make along the way, but the responsible thing to me, because the biggest threat to long-term economic output is the debt, is it not?

Mr. ELMENDORF. Yes, I think that is right, Senator. I think the challenge on the spending side is that the revenue lost from extending the tax cuts is a very large number, as we have reported, based on estimates from the staff of the Joint Committee on Taxation. And the full extension would reduce revenue by nearly $4 trillion over the next 10 years.

Senator ENSIGN. What percentage of revenues is that, over 10 years?

Mr. ELMENDORF. That, I do not know offhand. I think we do report in our—so I guess we report in this testimony that a full extension would reduce tax revenue by about 2 percent of GNP in 2020 against a base that is around 20 percent or so of GNP——

Senator ENSIGN. I am talking about as far as——

Mr. ELMENDORF [continuing]. I think it is about a 10-percent reduction in revenues. About a 10-percent reduction in revenues.

Senator ENSIGN. A 10 percent reduction in revenues over that period of time. Have you looked at what States and cities are doing as far as cutting their budgets?

Mr. ELMENDORF. We follow it a little bit, not as closely as we follow the Federal Government.

Senator ENSIGN. Do we think there is 10 percent waste in the Federal Government?

Mr. ELMENDORF. Well, I think the problem turns out to be that one person's view of what is the waste differs from the other person's view of what is the waste.

Senator ENSIGN. OK. Let us take it this way. Every family, every business, local government, State governments across America right now are cutting their budgets and they are basically wringing out the waste. You talk to every business in America and that is what they have done over the last 2 years, and this is the private sector, and they had a lot of fat. The private sector did. Local governments had a lot of fat. State governments had a lot of fat, and they are wringing that out.

The one place where we have not wrung out and cut the fat is at the Federal level. If we can sit here and honestly say that we do not think there is at least 10 percent waste in the Federal Government, then that is a completely preposterous statement to think that we do not have at least 10 percent waste in this government.

And so all I am saying is that $4 trillion is a big number. It sounds like a big number. Except when you look at it, it is 10 percent. And if we do not think that we can take 10 percent and get this government more efficient by 10 percent by cutting out inefficient programs and streamlining programs, eliminating duplication, eliminating waste, I think that if this Congress cannot find 10 percent waste, then they should throw this Congress out. That is all I am saying. And that is why I think that the 10-percent number is really, really important.

Mr. ELMENDORF. So, Senator, it is up to you and your colleagues. It is not our place to say what parts of the government should be bigger or smaller in what ways. But I do want to just emphasize the magnitude of the problem here. So the left set of bars show revenues and then spending under current law and the right set show them with the tax cuts extended and the AMT indexed, kind of the full extension through 2020 we have been talking about.

So on the right-hand set of bars, that red box is the size of the deficit. You can see that that amount is larger than all of the spending on Social Security in 2020. It is, I think, a little smaller than all of the Federal spending on Medicare and Medicaid and health insurance subsidies. It is much larger than all spending on defense. It is much larger, you can see, than the box right next to it, which is all spending apart from those handful of the largest programs.

Senator ENSIGN. And a big part of that, a big part of the reason for those deficits is because in that year, that $1.4 trillion deficit, at that point, how much of that is interest on the debt?

Mr. ELMENDORF. Well, so interest is large, and you can——

Senator ENSIGN. It is over $900 billion, is that not correct?

Mr. ELMENDORF. Exactly. With those tax cuts extended, that is a fair estimate.

Senator ENSIGN. That is because we are adding to it every year right now with such huge numbers. And what Senator Gregg talked about, about spending being the largest part of the problem, that is why at the Federal level we need to get spending under control. That is why we are at a critical point, because this is unsustainable. The numbers you are putting up here, it is unsustainable. This country is going to become Greece, except we do not have the European Union to bail us out. If we have these kind of debt and deficit numbers going into the future, it is unsustainable, and that is why this Congress needs to heed the warning that we have to get our spending habits under control. It is critical for the future of this country.

Thank you, Mr. Chairman.

Chairman CONRAD. Senator Warner?

Senator WARNER. Thank you, Mr. Chairman, and thank you, Director Elmendorf, for your comments. I concur with my colleague from Nevada on streamlining, as somebody who was a Governor who did some of that.

But I also think the notion, and I think your testimony reflects this, that the problem is of such a magnitude that if we are only going to do it on one side of the balance sheet, this challenge is going to require us to recognize sufficient revenues to meet core functions of the government. Cutting the revenue side constantly and saying we are going to simply find all of the spending through waste and fraud is a tired and true political axiom that has never proven to be the case.

But at the same time, those who say we can simply tax on the top end and continue to spend at the rate, I think it is going to take both sides. I would have preferred, frankly, the statutory approach that the Chairman and the Ranking Member had on a fiscal commission. Unfortunately, many of our colleagues on the other side of the aisle would not join us on that statutory approach that would have forced our feet to the Fire. I am hopeful that the Presidential Commission, and I hope that all the members will keep their powder dry to let this Presidential Commission work its way through, and I hope it comes up with very bold and challenging courses that challenges the orthodoxies of both political parties to make hard choices, because the notion that we are going to do it on simply the spending side or simply the revenue side, is false.

Let me turn my questions back to your first chart, sir, where you looked at things that could have effect on unemployment in the next couple of years. We seem to be having a binary discussion here, either extend the so-called Bush tax cuts for everyone, or some on my side, extend them for the 98 percent and let them expire for the top end, and a lot of debate about the value of that top-end 2 percent, $700 billion over 10 years in terms of lost revenue, approximately, I think since it is an accelerating number, more in the $70 billion over the two-year period. I know some have said, let us simply extend for the top 2 years [sic].

The question I would have, is if we say that taking that money out of the economy on the short-term basis may have some negative effects, and then the only choice becomes, let us just leave it with the top income earners, some of which may spend, but many of whom will, evidence will show, would simply save those dollars and deposit them, which would not have the kind of short-term effect we might need to get employment restarted and the recovery continued.

You have looked at payroll tax. You have looked at full and partial expensing of investment costs. What I am asking is, if we said what we could do for a 2-year period, $70 billion of targeted short-term tax cuts that might have the most bang for the buck, are those the two that you have analyzed, and are there others?

I would argue that at the macro level, we in government have used most of our bullets. We have used monetary policy and lowered interest rates to historic lows. And while perhaps not as efficiently as many, including myself, would have liked, we have used stimulus. The one good piece of news in our economy that does not get as much attention is that during this recession, large-scale enterprises have dramatically retooled and their balance sheets are healthier than ever. The balance sheets of American corporate 1000 companies today are healthier than they were pre-recession, north of $2 trillion sitting in cash on those balance sheets. Now, we can argue regulatory uncertainty, policy uncertainty. I will grant that is one of the issues.

But if you, and I am asking you to speculate here, had $70 billion of short-term targeted tax cuts that would expire in 2 years to try to get that $2 trillion off that corporate balance sheets, into the economy, reinvested as the economic engine, private sector engine that would jump-start it, would you choose either employers' payroll tax reduction, the immediate expensing, or are there other tax reduction tools on a short-term basis we could use to get that $2 trillion reactivated into the economy?

Mr. ELMENDORF. So, Senator, there may well be some other policies. We cast a fairly wide net in January, but I am sure we did not catch everything. Among the policies that we studied, as this chart shows, reducing employers' payroll taxes or allowing full or partial expensing of investment costs would have much more bang for the buck, much more positive impact on the economy per dollar of budgetary cost than would a broad extension of the expiring tax cuts.

Senator WARNER. And your assumption was that those would be, whether it is the payroll taxes or the immediate deducting, short-term, targeted, and during——

Mr. ELMENDORF. We studied simply temporary policies——

Senator WARNER. Temporary, year, 2-year, what have you?

Mr. ELMENDORF. Yes.

Senator WARNER. There are a host of other things, R&D tax credit, other issues out there. Did you go through the whole analysis? The business community has laid forward a series of other options, or——

Mr. ELMENDORF. So we have not looked as carefully at extending the research and experimentation tax credit. It is tricky. Because that tax credit has been extended many times before——

Senator WARNER. Right.

Mr. ELMENDORF [continuing]. Many businesses probably expect it to be extended. That probably means that if it were extended now and that uncertainty were resolved, that would have a little positive effect. But if you and your colleagues were going to enact an extension anyway, than it is not as incremental as——

Senator WARNER. Of course, if it was at 14 and the President has proposed raising it to 17, many OECD countries are at 20, and I am not——

Mr. ELMENDORF. So we looked a little bit at that. A small increase in the rate would matter a little bit. It probably would not——

Senator WARNER. And I do not want to just lay on that, but what I would ask—the Chairman has left, but I guess what I would love to see your office do some analysis is recognizing that if you take the dollar of 1 year or 2 year of that top 2 percent. Could those funds be better put to use, recognizing that perhaps taking those dollars out of the economy right now might not make that much sense, but where are we going to get our best bang for the buck? You are saying at this point your analysis says——

Mr. ELMENDORF. The policy——

Senator WARNER [continuing]. Payroll taxes or immediate expensing are the best bang——

Mr. ELMENDORF. Right.

Senator WARNER [continuing]. And you have——

Mr. ELMENDORF. Would be significantly more bang for the buck than extending all of the tax cuts. And within this bottom bar, extending all of the tax cuts, the extending the tax cuts in the higher brackets is actually the less effective piece of that because those people would be likely to spend a smaller share than people receiving the bulk of the rest of the tax cuts.

Senator WARNER. My time is about expired, but I would love to have your office go back and maybe scrub those a little bit more, and if you could give us with some more specificity bang for the dollar invested in terms of these targeted tax cuts, and I would ask you, as well, to look at some of the other menus of suggestions that the business community has laid out, because, again, my point is we have $2 trillion. That is the last bullet that we have not used. Getting those resources back invested in our economy, would be a great value.

Thank you, Mr. Chairman.

Mr. ELMENDORF. Thank you, Senator.

Senator NELSON [presiding]. Senator Bunning?

Senator BUNNING. Thank you, Mr. Chairman.

Dr. Elmendorf, thank you for coming. My question is one of kind of comparisons. Over the last two to 3 years, we have stimulated or spent or printed about $4.5 trillion if you count what the Federal Reserve has put in and taken out and put in, taken out, over the past two to 3 years, besides the money that the Congress has allocated either through TARP or through the stimulus program. So it is about $4 trillion, give or take.

The unemployment rate as of January 2009 was 7.7 percent. In August of this year, the unemployment rate was 9.6 percent. It has been in excess of 9 percent for over 16 consecutive months. With the stimulus that we used, can you estimate or have you the ability to estimate—I am not sure you do—when we are going to see 7.7 percent or pre- recession 5 percent unemployment rate? Can you give me an idea?

Mr. ELMENDORF. Well, so we do make projections, and you understand the uncertainty that——

Senator BUNNING. I understand the uncertainty because I have been here for 12 years and have looked at all the projections.

Mr. ELMENDORF. So our current projection, the projection we published in August is that under current law, the unemployment rate would fall back to the 7.7 percent you have in mind, I think in 2012 at some point.

Senator BUNNING. Twenty-twelve?

Mr. ELMENDORF. Twenty-twelve.

Senator BUNNING. Are you telling me that the 15 million part-time or totally unemployed people will be back to work?

Mr. ELMENDORF. Well, there is a lot of churning, of course, in the labor force, so many people who are without work today will find jobs, but others will lose jobs, so on balance, we think the unemployment rate, as we say in the testimony, will remain above 8 percent until 2012 and remain above 6 percent until 2014.

There is a significant and growing literature on the effects of—on the longer-term effects of financial crisis, and in addition to the severe recessions that often follow immediately, that literature shows very clearly that economic growth can be weak for many years to come.

And the question about the 5-percent unemployment rate that you raised, we do project the unemployment rate going back down to 5 percent, but there are reasons other people are more concerned that that may not happen, or may not happen for quite a long time, because of tremendous dislocations in the financial system and the economy and the longer-term effects of that.

Senator BUNNING. Well, use a personal family unemployed. I have a grandson who is unemployed. He has been unemployed now for 8 months. His job is never going to come back. Delta Airlines used to have 400 flights out of the Greater Cincinnati Airport. They are at one-third the number of flights now, not to ever return to the 400-plus that they had at one time. So his job is never going to come back. He is going to have to be reeducated into some other type of position.

Tell me this, and I have seen all your wonderful charts on the employment, the tax, the changes or the non-changes in the tax code, the expiration of the tax at the end of this year. Have we ever been successful in raising taxes to help our economy in a recession?

Mr. ELMENDORF. Not that I am aware of, Senator. Raising taxes in a recession will tend to slow economic growth, and that is, as we have explained in our report, part of why we have such a slow growth rate projected for 2011 under current law.

Senator BUNNING. And how do you get out from under that?

Mr. ELMENDORF. Well, so in the short run, tax cuts or government spending increases provide a boost. The challenge, as you understand——

Senator BUNNING. Is the balance.

Mr. ELMENDORF [continuing]. Is what happens beyond that, and over the medium- term and long-term, unless those actions are undone, offset in some way by other actions, then there is a medium-term and long-term drag on the economy.

Senator BUNNING. We talked about debt and other things, and we did not talk about interagency debt. Right now, to pay our Social Security benefits, the Federal Government has borrowed right at a trillion dollars from the Social Security Trust Fund, right at. We have written IOUs. They are kept in Parkersburg, West Virginia, and there is nothing to back it except the IOU, which means that the Federal Government has to make good on those IOUs——

Mr. ELMENDORF. Yes.

Senator BUNNING [continuing]. And they do not have anything to do except to print the money, or——

Mr. ELMENDORF. Raise taxes or——

Senator BUNNING [continuing]. Raise taxes or raise——

Mr. ELMENDORF [continuing]. When the IOUs come due.

Senator BUNNING. Yes, any way you can pay off that trillion dollars. So my question—this is a little off the wall, and it is the last question I will do—according to the Social Security and Medicare Board of Trustees' most recent report, Social Security is projected to begin permanently facing deficits in 2015—permanently—and Medicare will become insolvent in 2029. However, if this was not bad enough, the report indicates that Social Security will begin operating with a cash-flow deficit this very year.

Should we not be concerned about the impact this, paired with the large budget deficits that this administration has projected, will have on my 40 grandchildren and future generations?

Mr. ELMENDORF. Senator, yes. I think the concern, the effects of mounting debt, will be felt particularly by future generations.

Senator BUNNING. Is that not just kind of a transferring of what we cannot pay for and what our excesses are presently to my children and grandchildren? Is that not kind of a wealth transfer or a debt transfer?

Mr. ELMENDORF. The issue about how large the Federal debt is is importantly a distributional issue across generations.

Senator BUNNING. Thank you very much for your answers.

Mr. ELMENDORF. Thank you, Senator.

Senator NELSON. Dr. Elmendorf, would you explain the phenomenon of the fact that the U.S. Government is borrowing more and more money, albeit the Federal Reserve is trying to hold down the rates, and why those rates projected well into the future, interest rates, are staying so low?

Mr. ELMENDORF. So I think most analysts believe that interest rates are low because although the Federal Government is borrowing a tremendous, unprecedented amount, private borrowers are borrowing much less than they generally borrow, and interest rates will reflect the overall balance between the demand and supply of credit. So one can think about the decline in private borrowing as reflecting and reinforcing the slow private spending. The Federal Government has stepped in, partly through automatic stabilizers and partly through deliberate actions, to try to boost spending and is boosting its borrowing as part of that, and it is the balance of those forces with a supply of funds, some coming in from overseas and some from domestic saving, that leads to the level of interest rates.

In our forecast, interest rates rise a good deal over the coming decade as the economy recovers and private credit demands go up. And meanwhile, Federal borrowing would be very high, and the combination of that demand, we think will push interest rates up a good deal over the course of the decade. Together with the very high level of Federal debt, that leads to interest payments being unprecedentedly large relative to the GDP by the end of the decade.

Senator NELSON. Do your projections square with the projections of the Federal Reserve?

Mr. ELMENDORF. I mean, they are—the Federal Reserve does not release projections that go out over the entire decade. They do—the FOMC releases its projections for a period of several years. Our forecasts are generally fairly close to theirs, not every specific, but yes, in general, they are. I do not think our views in general about the state of the economy are idiosyncratic in any way to us.

Senator NELSON. And the market would give us some idea of what the market thinks about interest rates. How do you square the fact that 10-year Treasury bills are being sold at such low rates in light of what you just said?

Mr. ELMENDORF. Well, I think that, again, part of it is the overall weakness in the demand for credit from private borrowers in this country. Part of it is the continued flow of money into this country. As bad as our financial crisis seemed to us, the U.S. market still seemed safer to many investors than markets overseas.

I think the other part of that is that their financial markets seem to believe that you and your colleagues will put fiscal policy onto a sustainable path, and when fiscal crises erupt, and we released an issue brief about this a few months ago, it generally comes from a loss of that confidence, when investors feel that a government of some country is not acting in a way to put fiscal policy in that country on a sustainable path. It is very difficult to predict what sorts of events and what sorts of circumstances can lead to that loss in confidence. I think at the moment, investors believe that U.S. Fiscal policy will be put on a sustainable path. How that confidence will evolve in response to actions that are taken or not taken by you and your colleagues, I do not know.

Senator NELSON. I would like for you to comment, if you will, on the wisdom of a tax policy given the fact that in your testimony you said that the national debt is going to amount to 70 percent of GDP for the next 10 years. And in looking to find sources of revenue, the loopholes that we find in the system now allow multinational companies, and an example that is fresh in our minds is BP, to receive tax credits for—tax credits that were intended not for oil companies, but for manufacturing companies. Do you think that from a policy standpoint—I will not ask you the political question—that closing tax loopholes should be a priority in the debt reduction efforts?

Mr. ELMENDORF. I think that kind of policy choice has to be yours and your colleagues', Senator, but I think—and specific tax provisions can have positive or negative effects on economic outcomes, depending on the provision, and I do not want to just speak too generically about them, but I did say earlier and will repeat that I think a wide consensus of analysts would agree that a tax code with a broader base of income at the corporate or individual level to be taxed and lower rates would be more efficient than a tax code with a narrow base and higher rates. But the specific provisions that one would change to move from one to the other, we would have to look at on an individual basis.

Senator NELSON. Before I go on to the next question, I will just opine that another example of a loophole is that the taxpayers are actually giving tax money to oil companies to encourage them to drill in deepwater, something that the oil companies vigorously want to do because of the oil reserves, and yet royalty relief, that is those payments that would normally be paid to the U.S. Government when U.S. Federal lands are utilized, that those royalty payments were forgiven to oil companies over a technicality. I do not think that a lot of people in America realize that tax dollars, their tax dollars, are actually being used to pay oil companies to drill in deepwater.

I want to ask you about exports, and I want to ask you about the potential for U.S. exports to partially fill this void of the deficit. Give us your ideas about the impact of increased exports as a means of reduction and a reduction of our trade deficit, which would help our overall fiscal outlook.

Mr. ELMENDORF. So I think that if our exports could be increased, that would certainly—that extra demand for U.S. goods would lead to more production and more employment by U.S. firms. That kind of strengthening of the economy would be good for the Federal budget.

The challenge is to see what forces in the world or what policies you might enact would boost exports, and that is a little harder. As you know, much of the rest of the world, particularly the parts that tend to import our goods, that represent our exports, are also suffering from weakness in their economies, and if they had stronger economies, that would help us, too. But we do not control that, and, of course, they are trying to strengthen their own economies.

I think the actions that firms have taken in the last few years to raise productivity in this country have been in the short-term bad for unemployment, but over time can make us more competitive in a way that could be good for exports and employment in other ways. But there are not, I think, a lot of policy levers that would have a very substantial effect on the total amount of exports over any sort of short-term period. So our projections are really looking at what is happening around the world and the weakness in other economies implies sort of only slow growth in demand for our products.

Senator NELSON. In certain States, mine included, the economy is so down in the dumps because of the housing market. I was curious when talking to one of the Senators from Wyoming that they have less—or they are hovering around only a 6-percent unemployment rate. Compare that to other States, mine included, which has been in the range of 12 percent. It may be down in the 11 percent range now, 11.5. For the record, I want you to tell us, how are we going to right our deficit situation without stabilizing the housing market?

Mr. ELMENDORF. So this map from our testimony shows unemployment rates across States as of August, and one can see that some of the States with the highest unemployment rates are exactly those that have the largest housing booms and then the largest housing busts to follow, and your State is one of them, Senator.

The persistent weakness in the housing market is an ongoing drag on the economy. The number of houses started so far this year on a per month basis is a little above last year's extremely low level, but still much lower than would be required on a regular basis to house our growing population. The proximate cause of that is a lot of unoccupied houses today, and that stems both from the overbuilding that happened earlier, but also from the weakness of the economy. People who do not have jobs or who are afraid of losing jobs or working part-time jobs are much less likely to form their own households and seek their own places to live than they would be if they were confident in having a full-time job they would have for some period of time.

And I think there is a reinforcing pattern of weak economies and reinforcing patterns in strong economies. Part of what is happening here is that the weak economy is limiting the demand for housing, not the demand people feel in their hearts, but the demand they can actually display in the market. They are not going out looking for new homes. And that weakness in the housing market is then reducing the number of people employed to build new houses. It is keeping down house prices, making people feel somewhat poorer, and those things are reinforcing the weakness in employment and spending.

There are policies that have been discussed to try to strengthen the housing market. One particular policy that has been getting a lot of discussion in the last few months and that we have been looking into is ways to change what Fannie Mae and Freddie Mac do in terms of allowing people to refinance their mortgages. So a significant share of American households now owe more on their homes than the homes are worth, and a lot of others have a little bit of positive equity, but not very much. And that prevents them from refinancing in the way that they might otherwise refinance, given how far mortgage rates have fallen.

There have been a number of proposals floated by analysts and advocates to relax the rules that Fannie and Freddie impose on being able to refinance your mortgage, and we are looking at this now, and I say our work is at a preliminary stage, but our view fits that of outside people that one could improve the cash-flow of homeowners by tens of billions of dollars per year through a relaxation of these rules about refinancing, essentially letting people take advantage of the decline in rates the way that they would have in the past but cannot now because of the decline in house prices.

And there might be some consequences of that for the Federal budget. I do not want to suggest it is a free lunch. But there are reasons to think it actually is a fairly effective piece of stimulus working through the housing sector.

Senator NELSON. And a corollary to that, I just recently had a major car dealer get in touch of me, and it is typical of what is happening in the housing market, as well, only in this case it is small business, the bank has revalued the properties upon which the car dealer has the mortgages and the bank is unyielding. They are saying, since the value of your property, real estate, in this case the dealerships, has come down and your mortgage is here, you have got to pay off. Well, of course, in this economy, car dealers are not doing particularly well, although it is getting better, and so they do not have a lot of cash hanging around.

And here, they are looking at the possibility of foreclosure on a major good business that has never missed a mortgage payment, and but for the uniqueness of this in a State like up there, those dark-colored States where the property values have dropped out of the bottom, but for that uniqueness, this would be a continuing taxpayer who is paying the bills and paying the mortgages. Your comments?

Mr. ELMENDORF. So I think you are just right to note that there are a lot of small businesses that are facing trouble obtaining the credit they need to continue. Senator Warner mentioned earlier, correctly, that large businesses in this country are mostly quite healthy financially. They are sitting on assets. They are not spending.

It is much different for small businesses. And actually, if one looks at the patterns of layoffs and hiring across large and small businesses, large businesses have resumed hiring in a way that small businesses have not. So the lack of credit, but also very importantly just uncertainty about the state of the economy, and I think that always has to be put first on the list of uncertainties that businesses face, the uncertainty about the state of the economy and difficulty in getting credit has really restrained the hiring the small businesses are doing. They have not come back into the labor market looking for workers in the way that large businesses have. But I do not have a magic wand for the uncertainty and the weak demand.

Senator NELSON. Could you comment on the fact that we have just passed and sent to the President a major small business lending bill? It had a series of tax credits for small business, but it sets up a $30 billion lending facility, and under the terms of the legislation, that has to go through healthy community banks to then be lent, and it is defined in the legislation, to small businesses. Do you have any prognostication of how that may affect the future?

Mr. ELMENDORF. I do not think I really do. Our cost estimate for that legislation said that we think the money will be taken up so that the banks will come to the Federal Government for—the healthy banks that you noted will come to the Federal Government for this capital up to the limit in the legislation. So in that sense, we think that the program will encourage the banks to do business with the government and then to do business with small borrowers. But we have not looked at the overall economic effects of that, and in particular the extent to which they will be finding ways to just take credit for more lending to small businesses versus the ways in which they actual supply more credit than they otherwise would have, I think is not so clear, and we just have not looked at that policy that carefully.

Senator NELSON. So it must not have been CBO who made the estimate that the $30 billion lending facility would produce $300 billion of loans to small business.

Mr. ELMENDORF. Well, there is—I think that estimate comes from the capital requirements that banks have so that that $30 billion can support $300 billion of loans. The issue I was raising is whether that lending really is incremental to what would have happened otherwise or not, and that is the challenge in many government programs, trying to encourage certain behavior, is trying to distinguish between things that really are newly induced by the legislation versus things that might have been going on anyway that are sort of allowed to count. And we have not looked, to my knowledge, at that part of the question carefully, but we do think that money will go out of the Federal Government and will support small business loans, but it is the incremental effect on the economy that we have not studied.

Senator NELSON. Does any of the staff have any questions? OK.

Dr. Elmendorf, we are starting a series of votes right now and the Chairman has asked me to adjourn the hearing. We want you to know how much we appreciate your public service and thank you for this testimony this morning.

Mr. ELMENDORF. Thank you very much, Senator.

Senator NELSON. Thank you. The meeting is adjourned.

[Whereupon, at 11:31 a.m., the committee was adjourned.]

Senator Sessions Questions for the Record for CBO Hearing, September 28, 2010

1. A major issue before Congress recently has been stimulus spending. The past three years, Congress has pursued Keynesian-style stimulus to the tune of over $1.7 trillion. Unfortunately, we seem to have very little to show for it. Although the President's advisors confidently predicted the economy would add (not merely save) 3 million jobs, instead we have lost 2.5 million jobs since the main stimulus bill passed. To some economists, that's not surprising because they view investment as the most significant contributor to economic growth, and borrowing and spending money as we have been doing does basically nothing to increase incentives to work or invest. To other economists, stimulus must create jobs because they multiply the amount of stimulus dollars by a high multiplier and then get a high result. Gary Becker, the Nobel Prize winning economist, waded into this debate in February 2009 when he published an op ed in the Wall Street Journal stating that the multiplier from the stimulus package would likely be less than 1. John Taylor, another famous economist, has published numerous books and papers on economic stimulus. His research demonstrated that although the stimulus increased people's income temporarily, it did not increase their spending much if at all. In addition, he found that government purchases from the stimulus have contributed almost nothing to the recovery. He presented his research at a hearing in this committee last week. He then concludes that what little recovery we have seen is due to increased investment by business, which had little to do with the stimulus package. I know that CBO assumes a multiplier from stimulus of between 1.5 and 1.7. When CBO estimated the results of the stimulus package earlier this year, they estimated that it saved 1.5 million jobs. However, that estimate was apparently not based on actual measurement of the stimulus's effects. It was based merely on plugging in the amount that had been spent by an assumed multiplier. Why does CBO not use a more empirical approach to measuring the result of stimulus, such as that used by John Taylor? The IMF has now weighed into this debate as well by publishing its so-called Global Integrated Monetary and Fiscal Model, which predicts a multiplier of about 0.7. Given the research of economists such as John Taylor and the IMF, do you think it is time for the CBO to revise down its estimates for how much government spending increases economic growth? Where did CBO's current multipliers come from? This is important because as you know, the Administration is proposing an additional $50 billion in stimulus spending and Congress must be able to accurately determine the costs and benefits of such a proposal.

2. It appears that the United States is currently at a crossroads in fiscal policy. All of our current income tax rates are expiring at the end of this year, and it's time for Congress to make a decision. The choices are whether or not to increase taxes on everybody, and whether or not to increase taxes on anybody. Let's take a look at our historical rates of taxes and spending, and where we are today. The 50-year average level of spending is 20% of GDP, and the President's budget takes us to 25%. Also, the 50-year average level of taxation is 18% of GDP, and the President's budget takes us to 19%. The budget's spending is so high that even with a relatively high level of taxation, the deficit would still be 6% of GDP, a level that is both irresponsible and unsustainable. The question before us today is "What do we do about it?" Do we lower spending to remain a relatively low-tax, low-spending government, or do we raise taxes to transform into a high-tax, high-spending government? We can draw lessons in this from observing other countries. Many of our friends in Europe such as Sweden and France are high-tax, high-spending countries. Not coincidentally, they also have far lower per-capita incomes than the U.S. For example, our per-capita income is 38% higher than France's and 30% higher than Sweden's.[1] Dr. Elmendorf, I noticed in your testimony that you acknowledge a significant economic boost from keeping taxes on everybody low, but also note that if we maintain high deficits that will be a drag on economic growth in the future. All else being equal, do you think it is

[1] Heritage Foundation and WSJ, "Index of Economic Freedom," 2010.

better for economic growth to have low taxes and low government spending or high taxes and high government spending?

There has been much debate about the so-called Laffer Curve, discovered by economist Art Laffer, which shows that at some point of increasing taxation, government revenue will actually go down, not up. That is because the disincentives to work, save and invest caused by higher taxes outweigh the higher rate taken by the government. The debate is at which tax rate does that effect occur. Most free-market economists believe that it's at about 30%. According to recent op ed in the Wall Street Journal by Richard Rahn of the Cato Institute, economists who estimate a very high revenue maximizing rate fail to take into account the long-run changes in behavior of higher rates.[2] In other words, a high rate may bring in a lot of revenue the first year if it is a surprise, but after that people will take action to avoid paying higher taxes. What do you think is the revenue-maximizing rate of taxation? This is important because our highest tax bracket is now at 36%, which may be above the long-term revenue maximizing rate. Given the Laffer Curve, isn't it true that maintaining the 36% tax bracket will cost the government less than maintaining the lower-tax brackets? Does CBO take long-run changes in incentives to working and investing into consideration in its estimates?

I'm concerned that raising taxes as the President proposes will seriously impact small businesses. As economists Kevin Hassett and Alan Viard wrote recently in the Wall Street Journal, the top 3% of small businesses account for 50% of all small business income. Data from the National Federation of Independent Business and the U.S. Census demonstrate that those businesses employ 25% of all Americans. According to an NFIB survey, small businesses ranked taxes as the most important problem they faced, after weak sales.[3] What

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[2] Richard Rahn, "Tax cuts And Revenue: What We Learned in the 1980s," WSJ Editorial, Sept 25, 2010.

[3] Kevin Hassett and Alan Viard, "The Small Business Tax Hike and the 97% Fallacy," Wall Street Journal Editorial, Sept 3, 2010.

do you think the impact of raising taxes will be on small businesses? Although I understand your concerns about the deficit, Treasury Secretary Geithner has already said in a speech to the Center for American Progress that the revenue from increased taxes would be used for more stimulus, not paying down the debt.[4]

[4] CBSNews.com, "Geithner: Extending All Bush Tax Cuts a Mistake," Aug. 4, 2010.

Senator Bunning Questions for the Record for Outlook for Economy and Fiscal Policy Hearing with CBO Director Doug Elmendorf
September 28, 2010

Jim Bunning

1. The Majority claims that the close to 600 billion dollars in cuts to Medicare that are being used to pay for a new massive entitlement program will help improve the solvency of the Medicare program. Either Medicare savings improve solvency or they pay for this bill. How can they do both?

2. Since Congress passed PAYGO legislation and the President signed it into law this past February, we have added almost 300 billion dollars to the deficit, leaving our children and grandchildren to foot the bill. What impact do you think these unprecedented levels of deficit spending will have on our future generations?

3. Only five times in the past 35 years Congress has failed to produce a budget. Given the financial mess that the Federal government is in, what are the consequences of not adopting a budget?

4. What single policy change today could most improve economic growth over the long run?

5. How does the financial reform bill, with details left to be filled in by agencies later, affect credit for both businesses and consumers?

6. Based on our current pace of debt growth, at what point do we become Greece?

September 28, 2010

Questions for the Record for CBO Director Elmendorf:

Tax Cuts: As you point out in your written testimony, we must weigh the stimulating effects of tax cuts against the impact on the deficits and debt. As I understand it, the cost of making the higher-income tax cuts permanent is roughly equal to making the Make Work Pay tax credit permanent. Which course would be better stimulus if permanent? If just extended for a year?

Infrastructure: In your written testimony, you rank infrastructure investments as the second-to-least most effective of six stimulus options. You place infrastructure so low in part because "many infrastructure projects involve substantial start-up lags and because considerable infrastructure financing was already provided through ARRA." I'd like to ask you to use a somewhat different metric to rate the effectiveness of stimulus proposals. Instead of comparing the difference in the number of immediate jobs created, let's balance that against the long-term effect on the national debt. If we invest in infrastructure projects that we would need to do anyway, can't we advance jobs without adding to our nation's long-term liabilities?

Delivery System Reform: In your testimony, you state that "the future policy changes that would be needed to maintain fiscal sustainability could be substantial. For example, CBO projects that, under current law, the gap between revenues and spending in 2020 would be about $700 billion." This is an interesting figure given that the President's Council of Economic Advisers has concluded that "[i]t should be possible to cut total health expenditures about 30 percent without worsening outcomes ....which would...suggest that savings on the order of 5 percent of GDP could be feasible." Five-percent of GDP is roughly $700 billion. A substantial portion of these potential savings would inure to benefit of the federal budget. It strikes me that delivering more efficient health care is the low-hanging fruit of budget reform. Do you agree with that assessment? What steps should Congress and the Administration take to expedite the reforms in the Protection and Affordable Care Act and what additional steps would you recommend?

Congressional Budget Office

CBO'S RESPONSES TO QUESTIONS FOR THE RECORD----Hearing, September 28, 2010

Questions from Senator Sessions

Question 1: ***Why does CBO not use a more empirical approach to measuring the result of stimulus, such as that used by John Taylor? ... Given the research of economists such as John Taylor and the IMF, do you think it is time for the CBO to revise down its estimates for how much government spending increases economic growth? Where did CBO's current multipliers come from?***

Answer: In the process of estimating the effects of the government's fiscal policies on the economy, the Congressional Budget Office has reviewed an extensive amount of economic research from a wide variety of sources. Over time, CBO has continued to monitor the latest research on this topic, in addition to reviewing new economic data as it becomes available.[1]

CBO's Analysis

Different approaches and sets of assumptions can lead to widely differing estimates of the economic effects of fiscal policies. Moreover, the size of the effects may depend on the state of the economy, and the impact of some types of spending or tax cuts may differ substantially from others.[2] Because of the resulting uncertainty, CBO has incorporated a wide range of assumptions into its analysis. For example, CBO's analysis of the economic effects of the American Recovery and Reinvestment Act (ARRA) incorporated so-called multipliers—the estimated cumulative effect on the nation's output of a dollar's worth of a given policy—ranging from zero to 2.5 for various policies included in the act.[3] CBO has published estimates of ARRA's overall effects only as ranges, encompassing relatively low and relatively high estimates of the magnitude of those effects.

CBO bases its estimates of the direct, or first-round, effects of fiscal policies on a variety of historical evidence. For example, a number of economic studies provide a basis for estimating how much of a tax cut might be spent and how much saved, by different types of households.[4]

[1] For a review of recent research, see Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act From April 2010 Through June 2010* (August 2010), Appendix.

[2] See Eric M. Leeper, "Monetary Science, Fiscal Alchemy," National Bureau of Economic Research Working Paper 16510 (October 2010), for a discussion of the complexities involved in estimating fiscal effects.

[3] See Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act from June 2010 Through September 2010* (November 2010), Table 2.

[4] For example, see Jonathan A. Parker and others, "Consumer Spending and the Economic Stimulus Payments of 2008" (February 2010), www.kellogg.northwestern.edu/faculty/parker/htm/research/PSJM2010.pdf; Matthew D. Shapiro and Joel Slemrod, "Did the 2008 Tax Rebates Stimulate Spending?" *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 374–379; Sumit Agarwal, Chunlin Liu, and Nicholas S. Souleles, "The Reaction of Consumer Spending and Debt to Tax Rebates: Evidence from Consumer Credit Data," *Journal of Political Economy*, vol. 115, no. 6 (December 2007), pp. 986–1019; and David S. Johnson, Jonathan A. Parker, and Nicholas S. Souleles, "Household Expenditure and the Income Tax Rebates of 2001," *American Economic Review*, vol. 96, no. 5 (December 2006), pp. 1589–1610.

Those direct effects in turn may cause additional, indirect effects as their impact flows through the economy. For example, if the increased spending by recipients of tax cuts leads to increased production and hiring, then the resulting boost to profits and wages might result in still more spending by the affected firms and households, implying additional effects.

In estimating the size of indirect effects CBO drew heavily on versions of the commercial forecasting models of two economic consulting firms, Macroeconomic Advisors and Global Insight, and on the FRB-US model used at the Federal Reserve Board. Macroeconometric forecasting models of this sort are used widely, and they underlie most of the forecasts offered to the clients of economic consulting firms.

To reflect current economic conditions—in which there are considerable unused resources and in which short-term interest rates are very low and are expected to remain so for some time—CBO altered the models' usual formulation to reduce the extent to which interest rates respond to increases in output. Under more normal economic conditions, higher interest rates would offset roughly two-thirds of the cumulative impact of stimulative policies on gross domestic product over two years.

Other Possible Approaches

Some analysts have cited the results of an alternative class of models, which tend to imply smaller economic effects from such policies. In those models, people are assumed to make decisions about how much to work, buy, and save on the basis of current and expected future values of the wage rate, interest rates, taxes, and government purchases, among other things. In the basic form of such models, stimulus policies tend to crowd out a significant amount of other economic activity, and multipliers tend to be less than one—meaning that stimulative policies have less than a dollar-for-dollar impact on output.

Such models however are often not well-suited to analyze the effects of countercyclical fiscal policy, principally because they typically do not incorporate involuntary unemployment: Rather, such models incorporate the assumption that people can work as many hours as they choose at the wage rate determined by the market. In addition, in that type of model, people are generally assumed to be fully rational and forward-looking, basing their current decisions on a full lifetime plan. The extreme version of the forward-looking assumption implies that people expect to eventually pay for any increased government spending or reduced revenues in the form of tax increases and that they incorporate those expected payments—even if beyond their own lifetimes—into their current spending plans. Thus, they are assumed to curtail their consumption when government spending rises because their lifetime income and that of their heirs has fallen by the amount of the eventual taxes. For the same reason, in such models, cash transfer payments and tax refunds have little or no effect on current consumption. People in the models generally also have full access to credit markets, so they can borrow to maintain consumption in the face of a temporary loss of income. Finally, in these models, monetary policy usually follows the rule that increased output or inflation implies higher inflation-adjusted interest rates.

Recent research has shown that relaxing some of those modeling assumptions can result in much higher multipliers.[5] CBO has incorporated the results of that research into its view of the effects

[5] An IMF review of the estimates of seven different models illustrates the importance of the assumed interest rate response in this type of model. See Günter Coenen, Christopher Erceg, Charles Freedman, Davide Furceri, Michael

of government policies. However, the research results appear to be too dependent on particular assumptions for CBO to rely on them heavily.

Another type of research uses historical data to directly project how government policies will affect the economy on the basis of how economic variables such as output and consumption have behaved in the past relative to government spending and revenues. However, estimates of economic effects from this research vary widely and are sensitive to the period and estimation strategy used. Many estimates of this sort suggest that crowding-out effects dominate in the case of government purchases so that the impact on output tends to be less than one-for-one and tends to diminish over time. Some estimates, however, suggest multipliers higher than the range estimated by CBO. Estimated multipliers for tax cuts are generally higher than those for spending, and they tend to grow over time.[6]

Kumhof, René Lalonde, Douglas Laxton, Jesper Lindé, Annabelle Mourougane, Dirk Muir, Susanna Mursula, Carlos de Resende, John Roberts, Werner Roeger, Stephen Snudden, Mathias Trabandt, and Jan in 't Veld, Effects of Fiscal Stimulus in Structural Models, IMF Working Paper 10/73 (March 2010). For other examples of model estimates that incorporate a lower-than-usual response of interest rates to policy changes, see Robert E. Hall, *By How Much Does GDP Rise If the Government Buys More Output?* Working Paper 15496 (Cambridge, Mass.: National Bureau of Economic Research, November 2009); Lawrence Christiano, Martin Eichenbaum, and Sergio Rebelo, *When Is the Government Spending Multiplier Large?* Working Paper 15394 (Cambridge, Mass.: National Bureau of Economic Research, October 2009); and Troy Davig and Eric M. Leeper, *Monetary–Fiscal Policy Interactions and Fiscal Stimulus,* Working Paper 15133 (Cambridge, Mass.: National Bureau of Economic Research, July 2009). For examples of models that include liquidity-constrained or "rule of thumb" agents, see Marco Ratto, Werner Roeger, and Jan in 't Veld, "An Estimated Open-Economy DSGE Model of the Euro Area with Fiscal and Monetary Policy," *Economic Modelling,* vol. 26, no. 1 (January 2009), pp. 222–233; Lorenzo Forni, Libero Monteforte, and Luca Sessa, *The General Equilibrium Effects of Fiscal Policy: Estimates for the Euro Area,* Banca d'Italia Working Paper 652 (November 2007); and Jordi Gali, J. David López-Salido, and Javier Vallés, "Understanding the Effects of Government Spending on Consumption," *Journal of the European Economic Association,* vol. 5, no. 1 (March 2007), pp. 227–270. For model estimates in which government spending can contribute to future production, see Eric M. Leeper, Todd B. Walker, and Shu-Chun Susan Yang, *Government Investment and Fiscal Stimulus in the Short and Long Runs,* Working Paper 15153 (Cambridge, Mass.: National Bureau of Economic Research, July 2009). For a model that incorporates financial frictions in the form of a wedge between the interest rate paid by businesses on loans and the rate received by households on savings, see Jesús Fernández-Villaverde, "Fiscal Policy in a Model with Financial Frictions," *American Economic Review,* vol. 100, no. 2 (May 2010), pp. 35–40.

[6]See Christina D. Romer and David H. Romer, "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks," *American Economic Review,* vol. 100, no. 3 (June 2010), pp. 763–801; Robert J. Barro and Charles J. Redlick, *Macroeconomic Effects from Government Purchases and Taxes,* Working Paper 15369 (Cambridge, Mass.: National Bureau of Economic Research, September 2009); Andrew Mountford and Harald Uhlig, *What Are the Effects of Fiscal Policy Shocks?* Working Paper 14551 (Cambridge, Mass.: National Bureau of Economic Research, December 2008); Roberto Perotti, *In Search of the Transmission Mechanism of Fiscal Policy,* Working Paper 13143 (Cambridge, Mass.: National Bureau of Economic Research, June 2007); Olivier Blanchard and Roberto Perotti, "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output," *Quarterly Journal of Economics,* vol. 117, no. 4 (November 2002), pp. 1329–1368; and Valerie Ramey and Matthew Shapiro, "Costly Capital Reallocation and the Effects of Government Spending," *Carnegie–Rochester Conference Series on Public Policy,* vol. 48, no. 1 (June 1998), pp. 145–194. In interpreting the results of this research, it is important to note that the reported multipliers are generally "peak" multipliers—that is, they represent the largest effect on output in any one quarter of a dollar change to policy that persists in a way that is consistent with historical behavior—rather than the cumulative effect of a one-time dollar's worth of policy change, as CBO defines its multipliers. Similar research investigating the economic effects of fiscal consolidations—increases in taxes or decreases in government spending—may also inform analysis of the

One pitfall of the historical approach is that the direction of causation between policies and the economy is not always clear. For example, poor economic conditions can prompt the government to enact legislation such as ARRA in an effort to boost economic activity. If weak economic performance led to such a policy, it would not be accurate to ascribe that performance to the policy, rather than vice versa. Likewise, if states and localities reduced purchases and laid off employees when their budgets deteriorated in a recession, it would not be accurate to blame the recession on the cuts in government spending. When causation runs in both directions in this way, the historical correlation between variables is not always the best guide for predicting the effects of a new policy proposal.

One strategy that has been applied to overcome that obstacle is to try to isolate the economic impact of specific policies, such as wartime spending, that are arguably unrelated to other economic conditions. Wartime spending, however, might not be indicative of the effects of other increases in government spending. For example, during World War II, the rationing of many goods may have reduced the indirect effects of government spending on private consumption and investment. More generally, historical evidence shows the effects of policies under average economic conditions. Under current conditions—in which interest rates are apt to be less affected than usual by expansionary government policies and in which there are large amounts of idle resources—the effects would probably be greater than they were, on average, in the past.

A more direct approach is to examine the behavior of the economy over the period ARRA's policies have been in effect in order to estimate their effects.[7] However, those data are not as helpful in determining ARRA's economic effects as might be supposed because isolating the effects would require knowing what path the economy would have taken in the absence of the law. Because that path cannot be observed, the new data add only limited information about ARRA's impact. Even in retrospect it is very difficult to estimate a policy's impact on the economy.[8]

Question 2: ***All else being equal, do you think it is better for economic growth to have low taxes and low government spending or high taxes and high government spending? ....What do you think is the revenue-maximizing rate of taxation? .... Given the Laffer curve, isn't it true that maintaining the 36% tax bracket will cost the government less than maintaining the lower-tax brackets? Does CBO take long-run change in incentives to working and investing into consideration in its estimates? .... What do you think the impact of raising taxes will be on small businesses?***

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effects of fiscal stimulus. See International Monetary Fund, *World Economic Outlook: Recovery, Risk, and Rebalancing* (Washington, D.C., October 2010), Chapter 3; and Alberto Alesina and Silvia Ardagna, "Tales of Fiscal Adjustment," *Economic Policy*, vol. 13 no. 27 (October 1998), pp. 487-545.

[7] For example, see John B. Taylor, "Assessing the Federal Policy Response to the Economic Crisis," testimony before the Committee of the Budget, United States Senate (October 22, 2010).

[8] For a longer discussion of this issue, see Congressional Budget Office, *Did the 2008 Tax Rebates Stimulate Short-Term Growth?* (June 10, 2009).

Answer:

Levels of Taxes and Spending
In general, a fiscal policy of low taxes and low government spending tends to lead to higher private economic output in the long run than a policy of high taxes and high government spending. However, the precise economic effects depend on the types of taxes and government spending in the policy, and on how taxpayers value the government spending.

Some types of taxes, especially those such as fixed fees that do not influence economic choices on the margin, may have relatively little effect on long-run economic output. By contrast, taxes that involve high marginal rates on the returns to economic activities such as working or saving can have a substantial negative effect on long-run output.

Similarly, some types of spending—such as government payments contingent on individuals' behavior—can have negative effects on long-run output, while others—such as productive government investments—can have positive effects on long-run output. Moreover, some amount of government spending is crucial to maintain the basic framework of a well-functioning economy—by enforcing laws and contracts, for example.

In testimony before this Committee, Director Elmendorf presented some estimates that illustrate the effects of different mixes of fiscal policies.[9] Those estimates compare the effects of financing extension of the expiring provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) through decreases in government spending to the effects of financing that extension through increases in marginal tax rates after 2020. Those estimates suggest that this particular policy of extending the 2001 and 2003 tax cuts and reducing government spending (which implies a fiscal policy with lower taxation and lower government spending in the long run) would result in economic output roughly 5 percent to 8 percent higher in the long run than this particular policy of financing the extension of the tax cuts by increasing future tax rates (which implies a fiscal policy with higher taxation and higher government spending in the long run). Even with the lower output under the latter policy, however, incomes would be much higher in the future than they are today because of anticipated continued increases in productivity.

This analysis assumed that some policy changes in addition to the extension of the expiring tax provisions would ultimately be undertaken. An attempt by the government to indefinitely maintain a fiscal policy of low taxes and high spending would put federal debt on an unsustainable path, leading to reduced economic output and incomes.

The Impact of Tax Rates on Behavior and Revenues
The current tax system is composed of numerous statutory and effective marginal tax rates that apply at different levels and to various types of income. There is evidence that different types of income respond differently to changes in tax rates and also evidence that the response to tax rates varies across taxpayers at different income levels. Because of the variety of rates in the current system and the variety of response to changes in rate, there is no single revenue-maximizing tax rate in the context of the current system of rates.

[9] See Statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Committee on the Budget, *The Economic Outlook and Policy Choices* (September 28, 2010), Table 4.

The staff of the Joint Committee on Taxation (JCT) is responsible for estimating the revenue effects of changes in tax law. JCT's estimates of changes in tax law incorporate behavioral responses to changes in tax rates, including changes in the timing of income and deductions and shifts in the form of income received. By convention, standard revenue estimates do not incorporate changes in behavior that affect the size of the economy. As supplements to the standard revenue estimates, however, both JCT and CBO have analyzed the effect on revenues—including the impact of changes in the size of the economy—from certain changes in tax law. When preparing its baseline economic projections, CBO incorporates the economic effects of any enacted changes in tax laws into its projection for economic growth.

As noted in the Director's September 28 testimony, changes in marginal tax rates generally affect the quantity of savings and labor supplied to the economy. For example, lower marginal tax rates tend to increase both the return to saving and the return from working and would cause people to save and work more. These positive effects from the change in incentives on the number of hours worked and the amount saved would be offset somewhat because people might need to work or save less in order to have the same after-tax income with the lower tax rates. CBO concludes from the available research that for most changes in marginal tax rates, the incentive effects of lower tax rates are generally larger than the dampening effects of having additional after-tax income and therefore that lower marginal rates on net increase the amount that people work and save. Even with the added incentive to work and save, however, reducing tax rates from current levels, without any other changes in taxes or spending, would generally lower total revenues and increase budget deficits. Increased deficits, even with lower tax rates, can reduce economic activity over the longer term.

CBO has not separately examined the impact of reducing just the current top statutory tax rate of 35 percent, but it did analyze the impact of reducing the top two statutory tax rates. Specifically, for the September 28 Senate Budget Committee hearing, CBO analyzed the impact of extending the 2001 and 2003 tax cuts with and without extending the lower tax rates that apply to higher-income taxpayers.[10] CBO used different models and assumptions and accounted for the effects on incentives to work and save as well as the impact of a larger federal deficit from the proposed changes. After accounting for those effects, the revenue loss in 2020 from extending all of the lower tax rates would be greater than the revenue loss from an option that did not extend the lower tax rates for higher-income taxpayers. This was true for all the cases examined, including those that assumed a strong labor supply response to the lower tax rates. That result implies that *increasing* the tax rates affecting high-income taxpayers from current levels to levels in effect prior to 2001 would *raise* revenue in 2020. Estimates of the amount of revenue that would be raised vary among the different models and assumptions used in CBO's analysis.

The Impact on Small Businesses of Raising Taxes

Under current law, the lower individual income tax rates enacted in 2001 and 2003 will expire at the end of 2010. If that occurs, the top two tax rates—for couples with income over $250,000 and singles with income over $200,000—would rise from 33 percent and 35 percent to 36 percent and 39.6 percent.

[10] The rate changes excluded were for rates applying to married couples with income over $250,000 and single taxpayers with income over $200,000 and include the top two statutory tax brackets, the maximum rate on capital gains and dividends, and the phase-out of personal exemptions and itemized deductions.

There is some concern that higher marginal tax rates would particularly affect small businesses. However, those higher rates would apply to only a small fraction of taxpayers reporting business income on their individual tax returns. The staff of the Joint Committee on Taxation estimated that in 2011, 3 percent of taxpayers (about 750,000 taxpayers) reporting business income on their individual income tax returns—income mainly from sole proprietorships, partnerships, and S-corporations –would be subject to the higher marginal tax rates in the top two brackets under the President's proposal. The income reported on those returns, however, would account for about 50 percent of total income from those sources reported on individual income tax returns.[11] Recipients of business income in the top two marginal income tax brackets would face the same changes in incentives for saving, investment, and work as recipients of other types of income in those tax brackets.

It is important, however, to distinguish between businesses that are subject to the individual income tax and *small* businesses. Business income is taxed under the individual income tax if it comes from unincorporated businesses such as sole proprietorships or partnerships or from corporations with a limited number of shareholders (S-corporations) that are treated the same way as unincorporated businesses. Income from those businesses flows through to the owners or partners in the firm and is taxed at the individual level. There is no corporate income tax for such flow-through businesses. Although there is no standard definition of a small business, it is typically defined in terms of total employment, receipts, or assets. In those terms, not all of those flow-through businesses are necessarily small, just as not all corporate businesses are necessarily large.

To illustrate, small businesses with up to 40 employees and annual receipts averaging about $1 million account for about 25 percent of employment. In 2005, 17 percent of S-corporations filing income tax returns reported receipts of more than $1 million, but those firms accounted for 88 percent of the total receipts of S-corporations in that year. Likewise, 7 percent of partnerships reported total receipts in excess of $1 million, but those firms accounted for 95 percent of total partnership receipts.[12] In other words, most of the business income subject to the individual income tax is probably attributable to firms with over $1 million in receipts and not necessarily the smallest firms.

Businesses that are small receive a number of tax benefits that are not available to larger firms. Among these benefits are more generous depreciation rules (expensing) for investments in machinery and equipment, the exclusion from taxation of capital gains on the sale or exchange of qualified small business stock, simplified accounting rules, the graduated corporate income tax rate structure for a small business organized as a regular corporation, and exemption from the corporate income tax if the small business is not organized as a corporation.[13]

Although the special needs of small businesses and their role in generating jobs and economic growth are often cited as a reason for targeted tax benefits, others have argued that there is no

[11] Joint Committee on Taxation, *Present Law and the President's Fiscal Year 2011 Budget Proposals Related to Selected Individual Income Tax Provisions Scheduled to Expire Under the Sunset Provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001*, JCX-36-10, July 12, 2010.
[12] Joint Committee on Taxation, *Tax Reform: Selected Federal Tax Issues Relating to Small Business and Choice of Entity*, JCX-48-08, June 4, 2008.
[13] See Gary Guenther, *Small Business Tax Benefits: Overview of Current Law and Economic Justification*, Congressional Research Service report for Congress RL32254, April 19, 2010.

clear economic rationale for this favorable treatment and that public policy should not favor certain types of business activities.[14] CBO is currently analyzing employment growth at small firms and the effects of federal policy on small firms.

[14] See Alan D. Viard and Amy Roden, *Big Business: The Other Engine of Economic Growth*, American Enterprise Institute for Public Policy Research, Tax Policy Outlook, no.1, June 2009; and Jane G. Gravelle, *Small Business and the Expiration of the 2001 Tax Rate Reductions: Economic Issues*, Congressional Research Service report for Congress R41392, September 3, 2010.

Questions from Senator Whitehouse

Question: ***As you point out in your written testimony, we must weigh the stimulating effects of tax cuts against the impact on the deficits and debt. As I understand it, the cost of making the higher-income tax cuts permanent is roughtly equal to making the Make Work Pay tax credit permanent. Which course would be better stimulus if permanent? If just extended for a year?***

Answer: CBO has compared the stimulative effects on the economy from a one-year extension of refundable tax credits for lower- and middle-income households (of which the Making Work Pay credit is an example) and a one-year extension of the tax cuts in the Economic Growth and Tax Relief Reconciliation Act of 2001(EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), together with extending higher exemption amounts for the Alternative Minimum Tax (AMT).[15] Both extensions were assumed to apply to calendar year 2011.

CBO estimated that the temporary extension of the refundable tax credits for lower- and middle-income households would raise output cumulatively between 2010 and 2015 by $0.30 to $0.90 per dollar of total budgetary cost, and add three to seven years of full-time equivalent employment during the 2010-2015 period per million dollars of total budgetary cost. Temporary extension of EGTRRA and JGTRRA would raise output cumulatively between 2010 and 2015 by $0.10 to $0.40 per dollar of total budgetary cost, and add one to four years of full-time equivalent employment. The stimulative effects of extending the refundable tax credits are larger per dollar of total budgetary cost because those credits have a greater effect on the after-tax incomes of households that are likely to be restricted in their spending by their current income and hence spend a greater share of the funds received.

Permanent extension of the EGTRRA and JGTRRA tax cuts would provide a larger boost to output in the short run than temporary extension, but the long-run effects on output would probably be more negative because of the greater impact on the budget deficit.[16] CBO has not analyzed the effects of permanent extension of refundable tax credits for lower- and middle-income households.

Question: ***If we invest in infrastructure projects we would need to do anyway, can't we advance jobs without adding to our nation's long-term liabilities?***

Yes, to the extent it is possible to accelerate spending on infrastructure that would ultimately occur in any case, current economic activity could be promoted without adding to long-term liabilities. However, infrastructure projects often involve considerable start-up lags. Experience with the American Recovery and Reinvestment Act (ARRA) suggests that fewer projects are "shovel ready" than one might expect: By the end of fiscal year 2009, less than 10 percent of the budget authority granted for infrastructure in that year had resulted in outlays. Moreover, given

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[15] See Congressional Budget Office, *Policies for Increasing Economic Growth and Employment in 2010 and 2011* (January 2010).

[16] See Statement of Douglas W. Elmendorf, Director, Congressional Budget Office, before the Senate Committee on the Budget, *The Economic Outlook and Policy Choices* (September 28, 2010).

the substantial increase in infrastructure funding provided by ARRA, achieving significant increases in outlays above the amounts funded by ARRA would probably take even longer, and ensuring that the added funding was invested wisely might be challenging.

Question: ***In your testimony, you state that "the future policy changes that would be needed to maintain fiscal sustainability could be substantial. For example, CBO projects that, under current law, the gap between revenues and spending in 2020 would be about $700 billion." This is an interesting figure given that the President's Council of Economic Advisers has concluded that "[i]t should be possible to cut total health expenditures about 30 percent without worsening outcomes....which would...suggest that savings on the order of 5 percent of GDP could be feasible." Five-percent of GDP is roughly $700 billion. A substantial portion of these potential savings would inure to benefit of the federal budget. It strikes me that delivering more efficient health care is the low-hanging fruit of the federal budget. It strikes me that delivering more efficient health care is the low-hanging fruit of budget reform. Do you agree with that assessment? What steps should Congress and the Administration take to expedite the reforms in the Protection and Affordable Care Act and what additional steps would you recommend?***

Answer: Experts generally agree that changes in government policy have the *potential* to produce substantial savings in both national and federal spending on health care without harming health. However, turning that potential into *reality* in a sector that accounts for one-sixth of the U.S. economy is likely to be a prolonged and difficult process.

Considerable consensus exists among experts about some types of changes that are likely to make the health sector more efficient. Unfortunately, little reliable evidence exists about exactly how to implement those types of changes. The major health care legislation enacted in the spring (the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act) set up a number of experiments in delivery and payment systems to induce providers to offer higher-quality and lower-cost care. However, for a number of reasons, it is unclear how successful the experiments will be: There is little reliable evidence about exactly how to move Medicare in the directions that many experts recommend; much more work needs to be done on measuring the quality and value of care; how federal agencies will administer the law is not knowable at this point; and the legislation included significant limitations on the experimentation that will occur. As a result, CBO projects limited savings from the experiments in delivery and payment systems during the next decade (taking into account the possibility that savings could be more or less than we anticipate).

Questions from Senator Bunning

Question 1: ***The Majority claims that close to 600 billion dollars in cuts to Medicare that are being used to pay for a massive new entitlement program will help improve the solvency of the Medicare program. Either Medicare savings improve solvency or they pay for this bill. How can they do both?***

Medicare's Hospital Insurance (HI) trust fund, like other federal trust funds, is essentially an accounting mechanism. In a given year, the sum of specified HI receipts and the interest that is credited on the previous trust fund balance, minus spending for Medicare Part A benefits, represents the surplus (or deficit, if the latter is greater) in the trust fund for that year. Any cash generated when there is an excess of receipts over spending is not retained by the trust fund; rather, it is turned over to the Treasury, which provides government bonds to the trust fund in exchange and uses the cash to finance the government's ongoing activities.

The HI trust fund is part of the federal government, so transactions between the trust fund and the Treasury are intragovernmental and have no net impact on the unified budget or on federal borrowing from the public. From a unified budget perspective, any increase in revenues or decrease in outlays in the HI trust fund represents cash that can be used to finance other government activities without requiring new government borrowing from the public. Similarly, any increase in outlays or decrease in revenues in the HI trust fund in some future year represents a draw on the government's cash in that year. Thus, the resources to redeem government bonds in the HI trust fund and thereby pay for Medicare benefits in some future year will have to be generated from taxes, other government income, or government borrowing in that year. The HI trust fund and other trust funds have important legal meaning but little economic or budgetary meaning.

The reductions in Part A outlays and increases in HI revenues resulting from the Patient Protection and Affordable Care Act (PPACA) will significantly raise balances in the HI trust fund and might suggest that significant additional resources have been set aside to pay for future Medicare benefits. However, only the additional savings by the government as a whole truly increase the government's ability to pay for future Medicare benefits or other programs, and those will be much smaller. Unified budget accounting shows that the majority of the HI trust fund savings under the legislation will be used to pay for other spending and therefore will not enhance the ability of the government to pay for future Medicare benefits.

Question 2: ***Since Congress passed PAYGO legislation and the President signed it into law this past February, we have added almost 300 billion dollars to the deficit, leaving our children and grandchildren to foot the bill. What impact do you think these unprecedented levels of deficit spending will have on our future generations?***

Answer: The economic effects of budget deficits and accumulating government debt can differ in the short run and the long run, depending importantly on the prevailing economic conditions when the deficits are incurred. During and shortly after a recession, the higher spending or lower taxes that generate larger deficits generally hasten economic recovery. In particular, when many workers are unemployed, and much capacity (such as equipment and buildings) is unused, higher government spending and lower tax revenues usually increase overall demand for goods and services, which leads firms to boost their output and hire more workers. But those short-term benefits carry with them long-term costs: Unless offsetting actions are taken at some point to pay off the additional government debt accumulated while the economy was weak, people's future incomes will tend to be lower than they otherwise would have been. Higher debt reduces the amount of U.S. savings devoted to productive capital and thus results in lower incomes than would otherwise occur, making future generations worse off.

Question 3: ***Only five times in the past 35 years Congress has failed to produce a budget. Given the financial mess that the Federal government is in, what are the consequences of not adopting a budget?***

Answer: A concurrent resolution on the budget is intended to guide Congressional action for the upcoming year by setting targets for spending and revenues as well as by including provisions that relate to budget enforcement and other topics. Such guidance, while not law (it is an internal guiding document of the Congress), can be an important tool to assist the Congress in setting priorities and allocating funding. The budget resolution provides a broad budgetary perspective and a longer-range view of the budgetary situation that are valuable guides to making the wide array of detailed budgetary decisions that face the Congress. Those detailed decisions are implemented each year through appropriation and authorization bills, which can still be enacted without a budget resolution in place.

It is impossible to determine the ultimate impact on the budget from the existence of—or lack of—agreement of the Senate and the House of Representatives on a concurrent resolution setting budgetary goals for the upcoming year or years. Nonetheless, having a budget resolution in place has probably made it easier for the Congress to complete action on budgetary matters in some years. For example, the budget resolution has occasionally included so-called "reconciliation instructions" to various committees to achieve specific goals for changes to revenues or direct spending, and some significant deficit control measures have been accomplished through that reconciliation process over the past 30 years.

Even in years when the House and Senate have not agreed to a budget resolution, each House of the Congress has generally established procedures and mechanisms to guide spending decisions. (For example, the House and Senate can agree on a top-line total for new discretionary appropriations without such a resolution.) Furthermore, both Houses of the Congress have pay-as-you-go (PAYGO) rules and abide by the statutory PAYGO law to control changes in mandatory spending and revenues. Those procedures are not affected by the presence or absence of a budget resolution.

Question 4: ***What single policy change today could most improve economic growth over the long run?***

Long-run economic growth is determined by factors such as technological advancement, growth in the capital stock, and the growth in the skills and efficiency of the nation's workforce. CBO has not attempted to evaluate or rank the enormous range of policies that could affect those factors.

Question 5: ***How does the financial reform bill, with details left to be filled in by agencies later, affect credit for both businesses and consumers?***

The Dodd-Frank Wall Street Reform and Consumer Protection Act will affect credit in both specific and general ways. CBO has not attempted to determine whether credit will be more readily available as a result of the act's passage. Such a determination would be especially difficult to make before agency regulations have been finalized.

Title XII of the act authorizes the appropriation of such sums as may be necessary to establish several programs aimed at increasing access to and usage of traditional banking services in lieu of alternative financial services, such as nonbank money orders and check cashing, rent-to-own agreements, and payday lending. CBO estimated that implementing this provision would cost $248 million over the 2011-2015 period, assuming appropriation of the necessary amounts. If those funds are appropriated, community development financial institutions could receive grants to make small loans available as an alternative to payday and car-title loans, providing a new source of credit for low- and moderate-income individuals.

CBO expects that other provisions of the act designed to improve the stability of financial markets and increase consumer and business confidence in those markets also could affect credit for both businesses and consumers. The following initiatives, among others, may affect the availability of credit:

- Programs to address systemic risk and failing firms:
    - The Financial Stability Oversight Council, and
    - The Orderly Liquidation Fund

- Programs to enhance consumer protections:
    - The Bureau of Consumer Financial Protection, and
    - Anti-predatory lending provisions

- Programs to improve the availability of information:
    - New authority for the Commodity Futures Trading Commission and Securities Exchange Commission to monitor swap transactions
    - New disclosure requirements for executive compensation
    - New reporting requirements for hedge funds.

Question 6: ***Based on our current pace of debt growth, at what point do we become a Greece?***

Answer: CBO analyzed the risks of such a crisis in a July 27, 2010, issue brief entitled *Federal Debt and the Risk of Fiscal Crisis*. Over the past few years, U.S. government debt held by the public has grown rapidly—to the point that, compared with the total output of the economy, it is now higher than it has ever been except during the period around World War II. The recent increase in debt has been the result of three sets of factors: an imbalance between federal revenues and spending that predates the recession and the recent turmoil in financial markets, sharply lower revenues and elevated spending that derive directly from those economic conditions, and the costs of various federal policies implemented in response to the conditions.

Further increases in federal debt relative to the nation's output (gross domestic product, or GDP) almost certainly lie ahead if current policies remain in place. The aging of the population and rising costs for health care will push federal spending, measured as a percentage of GDP, well above the levels experienced in recent decades. Unless policymakers restrain the growth of spending, increase revenues significantly as a share of GDP, or adopt some combination of those two approaches, growing budget deficits will cause debt to rise to unsupportable levels.

A growing amount of federal debt would also increase the probability of a sudden fiscal crisis during which investors would lose confidence in the government's ability to manage its budget, and the government would thereby lose its ability to borrow at affordable rates. It is possible that interest rates would rise gradually as investors' confidence declined, giving legislators advance warning of the worsening situation and sufficient time to make policy choices that could avert a crisis. But as other countries' experiences show, it is also possible that investors would lose confidence abruptly and interest rates on government debt would rise sharply. The exact point at which such a crisis might occur for the United States is unknown, in part because the ratio of federal debt to GDP is climbing into unfamiliar territory and in part because the risk of a crisis is influenced by a number of other factors, including the government's long-term budget outlook, its near-term borrowing needs, and the health of the economy.