CONTENTS

CHAPTER 1. TO RESCUE, REBALANCE, AND REBUILD ........ 25

Rescuing an Economy in Freefall ........................................ 26
Rescuing the Economy from the Great Recession .............. 28
Crisis and Recovery in the World Economy ....................... 29

Rebalancing the Economy on the Path to Full Employment ......................................................... 29
Saving and Investment ...................................................... 29
Addressing the Long-Run Fiscal Challenge ...................... 31
Building a Safer Financial System ................................. 32

Rebuilding a Stronger Economy ................................. 33
Reforming Health Care ................................................. 33
Strengthening the American Labor Force ...................... 35
Transforming the Energy Sector and Addressing Climate Change .................................................. 36
Fostering Productivity Growth Through Innovation and Trade ......................................................... 37

Conclusion ................................................................. 38

CHAPTER 2. RESCUING THE ECONOMY FROM THE GREAT RECESSION ............................................. 39

An Economy in Freefall .................................................. 39
The Run-Up to the Recession ............................................ 40
The Downturn .................................................................. 41
Wall Street and Main Street ............................................. 44

The Unprecedented Policy Response .......................... 46
Monetary Policy ............................................................... 47
Financial Rescue ............................................................. 49
Fiscal Stimulus ............................................................... 51
Housing Policy ............................................................... 55

The Effects of the Policies ........................................ 56
Commercial Real Estate ................................................................. 123
Business Investment ........................................................................ 126
Investment in the Recovery ............................................................ 126
Investment in the Long Run ............................................................ 127
The Current Account ...................................................................... 129
Determinants of the Current Account ............................................ 129
The Current Account in the Recovery and in the Long Run ......... 132
Steps to Encourage Exports ............................................................ 133
Conclusion .................................................................................... 135

CHAPTER 5. ADDRESSING THE LONG-RUN FISCAL CHALLENGE .................................................... 137
The Long-Run Fiscal Challenge .................................................... 137
Sources of the Long-Run Fiscal Challenge ..................................... 139
The Role of the Recovery Act and Other Rescue Operations ....... 143
An Anchor for Fiscal Policy ............................................................ 144
The Effects of Budget Deficits ....................................................... 145
Feasible Long-Run Fiscal Policies ................................................ 146
The Choice of a Fiscal Anchor ....................................................... 148
Reaching the Fiscal Target ............................................................ 149
General Principles ......................................................................... 149
Comprehensive Health Care Reform ............................................ 150
Restoring Balance to the Tax Code .............................................. 151
Eliminating Wasteful Spending .................................................... 155
Conclusion: The Distance Still to Go ............................................. 156

CHAPTER 6. BUILDING A SAFER FINANCIAL SYSTEM ................. 159
What Is Financial Intermediation? ................................................ 160
The Economics of Financial Intermediation .................................. 160
Types of Financial Intermediaries ................................................ 163
The Regulation of Financial Intermediation in the United States .... 166
Financial Crises: The Collapse of Financial Intermediation ......... 170
Confidence Contagion .................................................................. 170
Counterparty Contagion ............................................................... 172
Coordination Contagion ............................................................... 173
Preventing Future Crises: Regulatory Reform ......................... 174
Promote Robust Supervision and Regulation of Financial Firms ............................................................................................ 175
Establish Comprehensive Regulation of Financial Markets ...... 176
Provide the Government with the Tools It Needs to Manage Financial Crises .............................................................................. 178
Raise International Regulatory Standards and Improve International Cooperation ............................................................. 179
Protect Consumers and Investors from Financial Abuse ............ 179
CONCLUSION ........................................................................................................ 180

CHAPTER 7. REFORMING HEALTH CARE ........................................ 181
The Current State of the U.S. Health Care Sector .......... 182
Rising Health Spending in the United States ...................... 182
Market Failures in the Current U.S. Health Care System:
Theoretical Background .............................................................. 185
System-Wide Evidence of Inefficient Spending .................. 188
Declining Coverage and Strains on Particular Groups and Sectors .............................................................................................. 191
Health Policies Enacted in 2009 ............................................. 196
Expansion of the CHIP Program .............................................. 197
Subsidized COBRA Coverage .................................................. 197
Temporary Federal Medical Assistance Percentage (FMAP)
Increase .......................................................................................... 199
Recovery Act Measures to Improve the Quality and Efficiency of Health Care ................................................................. 201
2009 Health Reform Legislation .............................................. 202
Insurance Market Reforms: Strengthening and Securing Coverage .............................................................................................. 202
Expansions in Health Insurance Coverage Through the Exchange ........................................................................................... 205
Economic and Health Benefits of Expanding Health Insurance Coverage .................................................................................. 206
Reducing the Growth Rate of Health Care Costs in the Public and Private Sectors ................................................................. 207
The Economic Benefits of Slowing the Growth Rate of Health Care Costs ................................................................................ 210
CONCLUSION ........................................................................................................ 211
CHAPTER 8. STRENGTHENING THE AMERICAN LABOR FORCE ................................................................. 213

Challenges Facing American Workers ................................. 214
  Unemployment ................................................................. 214
  Sectoral Change .................................................................. 216
  Stagnating Incomes for Middle-Class Families ..................... 217

Policies to Support Workers .................................................. 219

Education and Training: The Groundwork for Long-Term Prosperity ................................................................. 221
  Benefits of Education .......................................................... 221
  Trends in U.S. Educational Attainment ................................. 222
  U.S. Student Achievement .................................................. 226

A Path Toward Improved Educational Performance ..... 227
  Postsecondary Education .................................................... 228
  Training and Adult Education ............................................. 229
  Elementary and Secondary Education ................................. 231
  Early Childhood Education ................................................ 233

Conclusion ................................................................................. 234

CHAPTER 9. TRANSFORMING THE ENERGY SECTOR AND ADDRESSING CLIMATE CHANGE .................. 235

Greenhouse Gas Emissions, Climate, and Economic Well-Being ................................................................. 236
  Greenhouse Gases .............................................................. 237
  Temperature Change ........................................................... 238
  Impact on Economic Well-Being ........................................... 239

Jump-Starting the Transition to Clean Energy .................. 243
  Recovery Act Investments in Clean Energy ......................... 243
  Short-Run Macroeconomic Effects of the Clean Energy Investments ................................................................. 246

Other Domestic Actions to Mitigate Climate Change ................................................................. 247

Market-Based Approaches to Advance the Clean Energy Transformation and Address Climate Change ... 248
  Cap-and-Trade Program Basics ............................................ 248
  Ways to Contain Costs in an Effective Cap-and-Trade System ............................................................................ 250
Coverage of Gases and Industries .................................................. 253
The American Clean Energy and Security Act .................................. 254
International Action on Climate Change Is Needed ........... 255
Partnerships with Major Developed and Emerging Economies ................................................ 256
Phasing Out Fossil Fuel Subsidies ............................................. 257
Conclusion ...................................................................................... 257

CHAPTER 10. FOSTERING PRODUCTIVITY GROWTH THROUGH INNOVATION AND TRADE ........................................ 259
The Role of Productivity Growth in Driving Living Standards .......................................................... 261
Recent Trends in Productivity in the United States .................................................. 262
Sources of Productivity Growth ........................................................................ 264
Fostering Productivity Growth Through Innovation ... 266
The Importance of Basic Research .................................................. 267
Private Research and Experimentation .................................................. 269
Protection of Intellectual Property Rights ........................................... 270
Spurring Progress in National Priority Areas ........................................... 272
Increasing Openness and Transparency .............................................. 272
Trade as an Engine of Productivity Growth and Higher Living Standards ........................................ 274
The United States and International Trade ........................................... 275
Sources of Productivity Growth from International Trade ........ 276
Encouraging Trade and Enforcing Trade Agreements ........................................... 280
Ensuring the Gains from Productivity Growth Are Widely Shared .............................................. 282
Conclusion ...................................................................................... 284

REFERENCES ..................................................................................... 285

APPENDIXES
A. Report to the President on the Activities of the Council of Economic Advisers During 2009 .............................................. 305
B. Statistical Tables Relating to Income, Employment, and Production .............................................. 319
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>House Prices Adjusted for Inflation</td>
<td>27</td>
</tr>
<tr>
<td>1-2</td>
<td>Monthly Change in Payroll Employment</td>
<td>28</td>
</tr>
<tr>
<td>1-3</td>
<td>Personal Consumption Expenditures as a Share of GDP</td>
<td>30</td>
</tr>
<tr>
<td>1-4</td>
<td>Actual and Projected Budget Surpluses in January 2009 under Previous Policy</td>
<td>31</td>
</tr>
<tr>
<td>1-5</td>
<td>Real Median Family Income</td>
<td>33</td>
</tr>
<tr>
<td>1-6</td>
<td>Total Compensation Including and Excluding Health Insurance</td>
<td>34</td>
</tr>
<tr>
<td>1-7</td>
<td>Mean Years of Schooling by Birth Cohort</td>
<td>36</td>
</tr>
<tr>
<td>1-8</td>
<td>R&amp;D Spending as a Percent of GDP</td>
<td>37</td>
</tr>
<tr>
<td>2-1</td>
<td>House Prices Adjusted for Inflation</td>
<td>40</td>
</tr>
<tr>
<td>2-2</td>
<td>Income and Consumption Around the 2008 Tax Rebate</td>
<td>42</td>
</tr>
<tr>
<td>2-3</td>
<td>TED Spread and Moody’s BAA-AAA Spread Through December 2008</td>
<td>43</td>
</tr>
<tr>
<td>2-4</td>
<td>Assets on the Federal Reserve’s Balance Sheet</td>
<td>48</td>
</tr>
<tr>
<td>2-5</td>
<td>TED Spread and Moody’s BAA-AAA Spread Through December 2009</td>
<td>57</td>
</tr>
<tr>
<td>2-6</td>
<td>S&amp;P 500 Stock Price Index</td>
<td>58</td>
</tr>
<tr>
<td>2-7</td>
<td>Monthly Gross SBA 7(a) and 504 Loan Approvals</td>
<td>60</td>
</tr>
<tr>
<td>2-8</td>
<td>30-Year Fixed Rate Mortgage Rate</td>
<td>61</td>
</tr>
<tr>
<td>2-9</td>
<td>FHFA and LoanPerformance National House Price Indexes</td>
<td>63</td>
</tr>
<tr>
<td>2-10</td>
<td>Real GDP Growth</td>
<td>64</td>
</tr>
<tr>
<td>2-11</td>
<td>Real GDP: Actual and Statistical Baseline Projection</td>
<td>65</td>
</tr>
<tr>
<td>2-12</td>
<td>Contributions to Real GDP Growth</td>
<td>66</td>
</tr>
<tr>
<td>2-13</td>
<td>Average Monthly Change in Employment</td>
<td>68</td>
</tr>
<tr>
<td>2-14</td>
<td>Estimated Effect of the Recovery Act on Employment</td>
<td>69</td>
</tr>
<tr>
<td>2-15</td>
<td>Contributions to the Change in Employment</td>
<td>71</td>
</tr>
<tr>
<td>2-16</td>
<td>Okun’s Law, 2000-2009</td>
<td>74</td>
</tr>
<tr>
<td>3-1</td>
<td>Interbank Market Rates</td>
<td>83</td>
</tr>
<tr>
<td>3-2</td>
<td>Nominal Trade-Weighted Dollar Index</td>
<td>85</td>
</tr>
<tr>
<td>3-3</td>
<td>OECD Exports-to-GDP Ratio</td>
<td>87</td>
</tr>
<tr>
<td>3-4</td>
<td>Vertical Specialization and the Collapse in Trade</td>
<td>88</td>
</tr>
<tr>
<td>3-5</td>
<td>Cross-Border Gross Purchases and Sales of Long-Term Assets</td>
<td>90</td>
</tr>
<tr>
<td>3-6</td>
<td>Industrial Production in Advanced Economies</td>
<td>91</td>
</tr>
<tr>
<td>3-7</td>
<td>Industrial Production in Emerging Economies</td>
<td>92</td>
</tr>
<tr>
<td>3-8</td>
<td>Headline Inflation, 12-Month Change</td>
<td>93</td>
</tr>
<tr>
<td>3-9</td>
<td>Policy Rates in Economies with Major Central Banks</td>
<td>94</td>
</tr>
</tbody>
</table>
7-3. Child and Infant Mortality Across G-7 Countries ................. 190
7-4. Insurance Rates of Non-Elderly Adults ................................. 192
7-5. Percent of Americans Uninsured by Age .............................. 193
7-6. Share of Non-Elderly Individuals Uninsured by Poverty Status ................................................................. 194
7-7. Medicare Part D Out-of-Pocket Costs by Total Prescription Drug Spending .............................................. 195
7-8. Share Uninsured among Adults Aged 18 and Over ................ 198
7-9. Monthly Medicaid Enrollment Across the States .................. 200
8-1. Unemployment and Underemployment Rates ...................... 214
8-2. Unemployment Rates by Race ............................................. 215
8-3. Real Median Family Income and Median Individual Earnings ........................................................................... 218
8-4. Share of Pre-Tax Income Going to the Top 10 Percent of Families ................................................................. 219
8-5. Total Wage and Salary Income by Educational Group .......... 222
8-6. Mean Years of Schooling by Birth Cohort ............................. 224
8-7. Educational Attainment by Birth Cohort, 2007 .................... 225
8-8. Long-Term Trend Math Performance .................................. 227
9-1. Projected Global Carbon Dioxide Concentrations with No Additional Action ...................................................... 238
9-2. Recovery Act Clean Energy Appropriations by Category ...... 246
9-3. United States, China, and World Carbon Dioxide Emissions ........................................................................... 255
10-1. Non-Farm Labor Productivity and Per Capita Income .......... 261
10-2. Labor Productivity Growth since 1947 ................................. 262
10-3. R&D Spending as a Percent of GDP .................................. 270
10-4. Exports as a Share of GDP ............................................... 275
10-5. Intra-Industry Trade, U.S. Manufacturing ......................... 278

LIST OF TABLES
2-1. Cyclically Sensitive Elements of Labor Market Adjustment .... 70
2-2. Forecast and Actual Macroeconomic Outcomes .................... 73
2-3. Administration Economic Forecast ...................................... 75
3-1. 2009 Fiscal Stimulus as Share of GDP, G-20 Members .......... 98
3-2. Stimulus and Growth in Advanced G-20 Countries ............. 104
5-1. Government Debt-to-GDP Ratio in Selected OECD Countries (percent) ...................................................... 147
LIST OF BOXES

2-1. Potential Real GDP Growth ........................................................... 76
4-1. Unemployment and the Current Account ..................................... 130
7-1. The Impact of Health Reform on State and Local
    Governments .................................................................................... 208
8-1. The Recession’s Impact on the Education System ......................... 224
8-2. Community Colleges: A Crucial Component of Our
    Higher Education System ............................................................... 230
9-1. Climate Change in the United States and Potential Impacts .......... 240
9-2. Expected Consumption Loss Associated with Temperature
    Increase .............................................................................................. 241
10-1. Overview of the Administration’s Innovation Agenda ................. 266