

# ECONOMIC REPORT OF THE PRESIDENT

TRANSMITTED TO THE CONGRESS FEBRUARY 2010

TOGETHER WITH THE ANNUAL REPORT OF THE COUNCIL OF ECONOMIC ADVISERS

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## PRESIDENT



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COUNCIL OF ECONOMIC ADVISERS

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#### C O N T E N T S

		Page
ECONOMIC R	EPORT OF THE PRESIDENT	1
ANNUAL REPO	ORT OF THE COUNCIL OF ECONOMIC ADVISERS*	11
CHAPTER 1.	TO RESCUE, REBALANCE, AND REBUILD	25
CHAPTER 2.	RESCUING THE ECONOMY FROM THE GREAT RECESSION	39
CHAPTER 3	CRISIS AND RECOVERY IN THE WORLD ECONOMY	81
CHAPTER 4.	SAVING AND INVESTMENT	113
CHAPTER 5.	ADDRESSING THE LONG-RUN FISCAL CHALLENGE	137
CHAPTER 6.	BUILDING A SAFER FINANCIAL SYSTEM	159
CHAPTER 7.	REFORMING HEALTH CARE	181
CHAPTER 8.	STRENGTHENING THE AMERICAN LABOR FORCE	213
CHAPTER 9.	TRANSFORMING THE ENERGY SECTOR AND ADDRESSING CLIMATE CHANGE	235
CHAPTER 10.	FOSTERING PRODUCTIVITY GROWTH THROUGH INNOVATION AND TRADE	259
REFERENCES		285
APPENDIX A.	REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 2009	305
APPENDIX B.	STATISTICAL TABLES RELATING TO INCOME, EMPLOYMENT, AND PRODUCTION	

<sup>\*</sup>For a detailed table of contents of the Council's Report, see page 15.

# ECONOMIC REPORT OF THE PRESIDENT

#### ECONOMIC REPORT OF THE PRESIDENT

#### TO THE CONGRESS OF THE UNITED STATES:

As we begin a new year, the American people are still experiencing the effects of a recession as deep and painful as any we have known in generations. Traveling across this country, I have met countless men and women who have lost jobs these past two years. I have met small business owners struggling to pay for health care for their workers; seniors unable to afford prescriptions; parents worried about paying the bills and saving for their children's future and their own retirement. And the effects of this recession come in the aftermath of a decade of declining economic security for the middle class and those who aspire to it.

At the same time, over the past two years, we have also seen reason for hope: the resilience of the American people who have held fast even in the face of hardship—to an unrelenting faith in the promise of our country.

It is that determination that has helped the American people overcome difficult periods in our Nation's history. And it is this perseverance that remains our great strength today. After all, our workers are as productive as ever. American businesses are still leaders in innovation. Our potential is still unrivaled. Our task as a Nation—and our mission as an Administration—is to harness that innovative spirit, that productive energy, and that potential in order to create jobs, raise incomes, and foster economic growth that is sustained and broadly shared. It's not enough to move the economy from recession to recovery. We must rebuild the economy on a new and stronger foundation.

I can report that over the past year, this work has begun. In the coming year, this work continues. But to understand where we must go in the next year and beyond, it is important to remember where we began one year ago.

Last January, years of irresponsible risk-taking and debt-fueled speculation—unchecked by sound oversight—led to the near-collapse of our financial system. We were losing an average of 700,000 jobs each month. Over the course of one year, \$13 trillion of Americans' household wealth had evaporated as stocks, pensions, and home values plummeted. Our gross domestic product was falling at the fastest rate in a quarter century. The flow of credit, vital to the functioning of businesses large and small, had ground to a halt. The fear among economists, from across the political spectrum, was that we could sink into a second Great Depression.

Immediately, we took a series of difficult steps to prevent that catastrophe for American families and businesses. We acted to get lending flowing again so ordinary Americans could get financing to buy homes and cars, to go to college, and to start businesses of their own; and so businesses, large and small, could access loans to make payroll, buy equipment, hire workers, and expand. We enacted measures to stem the tide of foreclosures in our housing market, helping responsible homeowners stay in their homes and helping to stop the broader decline in home values.

To achieve this, and to prevent an economic collapse, we were forced to use authority enacted under the previous Administration to extend assistance to some of the very banks and financial institutions whose actions had helped precipitate the turmoil. We also took steps to prevent the collapse of the American auto industry, which faced a crisis partly of its own making, to prevent another round of widespread job losses in an already fragile time. These decisions were not popular, but they were necessary. Indeed, the decision to stabilize the financial system helped to avert a larger catastrophe, and thanks to the efficient management of the rescue—with added transparency and accountability—we have recovered most of the money provided to banks.

In addition, even as we worked to address the crises in our banking sector, in our housing market, and in our auto industry, we also began attacking our economic crisis on a broader front. Less than one month after taking office, we enacted the most sweeping economic recovery package in history: the American Recovery and Reinvestment Act of 2009. The Recovery Act not only provided tax cuts to small businesses and 95 percent of working families and provided emergency relief to those out of work or without health insurance; it also began to lay a new foundation for long-term growth. With investments in health care, education, infrastructure, and clean energy, the Recovery Act has saved or created roughly two million jobs so far, and it has begun the hard work of transforming our economy to thrive in the modern, global era.

Because of these and other steps, we can safely say that we've avoided the depression many feared. Our economy is growing again, and the growth over the last three months was the strongest in six years. But while economic growth is important, it means nothing to somebody who has lost a job and can't find another. For Americans looking for work, a good job is the only good news that matters. And that's why our work is far from complete.

It is true that the steps we have taken have slowed the flood of job losses from 691,000 per month in the first quarter of 2009 to 69,000 in the last quarter. But stemming the tide of job loss isn't enough. More than 7 million jobs have been lost since the recession began two years ago. This represents not only a terrible human tragedy, but also a very deep hole from which we'll have to climb out. Until jobs are being created to replace those we've lost—until America is back at work—my Administration will not rest and this recovery will not be finished.

That's why I am continuing to call on the Congress to pass a jobs bill. I've proposed a package that includes tax relief for small businesses to spur hiring, that accelerates construction on roads, bridges, and waterways, and that creates incentives for homeowners to invest in energy efficiency, because this will create jobs, save families money, and reduce pollution that harms our environment.

It is also essential that as we promote private sector hiring, we continue to take steps to prevent layoffs of critical public servants like teachers, firefighters, and police officers, whose jobs are threatened by State and local budget shortfalls. To do otherwise would not only worsen unemployment and hamper our recovery; it would also undermine our communities. And we cannot forget the millions of people who have lost their jobs. The Recovery Act provided support for these families hardesthit by this recession, and that support must continue.

At the same time, long before this crisis hit, middle-class families were under growing strain. For decades, Washington failed to address fundamental weaknesses in the economy: rising health care costs, growing dependence on foreign oil, an education system unable to prepare all of our children for the jobs of the future. In recent years, spending bills and tax cuts for the very wealthiest were approved without paying for any of it, leaving behind a mountain of debt. And while Wall Street gambled without regard for the consequences, Washington looked the other way.

As a result, the economy may have been working for some at the very top, but it was not working for all American families. Year after year, folks were forced to work longer hours, spend more time away from their

loved ones, all while their incomes flat-lined and their sense of economic security evaporated. Growth in our country was neither sustained nor broadly shared. Instead of a prosperity powered by smart ideas and sound investments, growth was fueled in large part by a rapid rise in consumer borrowing and consumer spending.

Beneath the statistics are the stories of hardship I've heard all across America—hardships that began long before this recession hit two years ago. For too many, there has long been a sense that the American dream—a chance to make your own way, to work hard and support your family, save for college and retirement, own a home—was slipping away. And this sense of anxiety has been combined with a deep frustration that Washington either didn't notice, or didn't care enough to act.

These weaknesses have not only made our economy more susceptible to the kind of crisis we have been through. They have also meant that even in good times the economy did not produce nearly enough gains for middle-class families. Typical American families saw their standards of living stagnate, rather than rise as they had for generations. That is why, in the aftermath of this crisis, and after years of inaction, what is clear is that we cannot go back to business as usual.

That is why, as we strive to meet the crisis of the moment, we are continuing to lay a new foundation for prosperity: a foundation on which the middle class can prosper and grow, where if you are willing to work hard, you can find a good job, afford a home, send your children to worldclass schools, afford high-quality health care, and enjoy retirement security in your later years. This is the heart of the American Dream, and it is at the core of our efforts to not only rebuild this economy—but to rebuild it stronger than before. And this work has already begun.

Already, we have made historic strides to reform and improve our education system. We have launched a Race to the Top in which schools are competing to create the most innovative programs, especially in math and science. We have already made college more affordable, even as we seek to increase student aid by ending a wasteful subsidy that serves only to line the pockets of lenders with tens of billions of taxpayer dollars. And I've proposed a new American Graduation Initiative and set this goal: by 2020, America will once again have the highest proportion of college graduates in the world. For we know that in this new century, growth will be powered not by what consumers can borrow and spend, but what talented, skilled workers can create and export.

Already, we have made historic strides to improve our health care system, essential to our economic prosperity. The burdens this system places on workers, businesses, and governments is simply unsustainable. And beyond the economic cost—which is vast—there is also a terrible human toll. That's why we've extended health insurance to millions more children; invested in health information technology through the Recovery Act to improve care and reduce costly errors; and provided the largest boost to medical research in our history. And I continue to fight to pass real, meaningful health insurance reforms that will get costs under control for families, businesses, and governments, protect people from the worst practices of insurance companies, and make coverage more affordable and secure for people with insurance, as well as those without it.

Already, we have begun to build a new clean energy economy. The Recovery Act included the largest investment in clean energy in history, investments that are today creating jobs across America in the industries that will power our future: developing wind energy, solar technology, and clean energy vehicles. But this work has only just begun. Other countries around the world understand that the nation that leads the clean energy economy will be the nation that leads the global economy. I want America to be that nation. That is why we are working toward legislation that will create new incentives to finally make renewable energy the profitable kind of energy in America. It's not only essential for our planet and our security, it's essential for our economy.

But this is not all we must do. For growth to be truly sustainable for our prosperity to be truly shared and our living standards to actually rise—we need to move beyond an economy that is fueled by budget deficits and consumer demand. In other words, in order to create jobs and raise incomes for the middle class over the long run, we need to export more and borrow less from around the world, and we need to save more money and take on less debt here at home. As we rebuild, we must also rebalance. In order to achieve this, we'll need to grow this economy by growing our capacity to innovate in burgeoning industries, while putting a stop to irresponsible budget policies and financial dealings that have led us into such a deep fiscal and economic hole.

That begins with policies that will promote innovation throughout our economy. To spur the discoveries that will power new jobs, new businesses—and perhaps new industries—I have challenged both the public sector and the private sector to devote more resources to research and development. And to achieve this, my budget puts us on a path to double investment in key research agencies and makes the research and experimentation tax credit permanent. We are also pursuing policies that will help us export more of our goods around the world, especially by small

businesses and farmers. And by harnessing the growth potential of international trade—while ensuring that other countries play by the rules and that all Americans share in the benefits—we will support millions of good, high-paying jobs.

But hand in hand with increasing our reliance on the Nation's ingenuity is decreasing our reliance on the Nation's credit card, as well as reining in the excess and abuse in our financial sector that led large firms to take on extraordinary risks and extraordinary liabilities.

When my Administration took office, the surpluses our Nation had enjoyed at the start of the last decade had disappeared as a result of the failure to pay for two large tax cuts, two wars, and a new entitlement program. And decades of neglect of rising health care costs had put our budget on an unsustainable path.

In the long term, we cannot have sustainable and durable economic growth without getting our fiscal house in order. That is why even as we increased our short-term deficit to rescue the economy, we have refused to go along with business as usual, taking responsibility for every dollar we spend. Last year, we combed the budget, cutting waste and excess wherever we could, a process that will continue in the coming years. We are pursuing health insurance reforms that are essential to reining in deficits. I've called for a fee to be paid by the largest financial firms so that the American people are fully repaid for bailing out the financial sector. And I've proposed a freeze on nonsecurity discretionary spending for three years, a bipartisan commission to address the long-term structural imbalance between expenditures and revenues, and the enactment of "pay-go" rules so that Congress has to account for every dollar it spends.

In addition, I've proposed a set of common sense reforms to prevent future financial crises. For while the financial system is far stronger today than it was one year ago, it is still operating under the same rules that led to its near-collapse. These are rules that allowed firms to act contrary to the interests of customers; to hide their exposure to debt through complex financial dealings that few understood; to benefit from taxpayer-insured deposits while making speculative investments to increase their own profits; and to take on risks so vast that they posed a threat to the entire economy and the jobs of tens of millions of Americans.

That is why we are seeking reforms to empower consumers with the benefit of a new consumer watchdog charged with making sure that financial information is clear and transparent; to close loopholes that allowed big financial firms to trade risky financial products like credit defaults swaps and other derivatives without any oversight; to identify system-wide risks that could cause a financial meltdown; to strengthen capital and liquidity requirements to make the system more stable; and to ensure that the failure of any large firm does not take the economy down with it. Never again will the American taxpayer be held hostage by a bank that is "too big to fail."

Through these reforms, we seek not to undermine our markets but to make them stronger: to promote a vibrant, fair, and transparent financial system that is far more resistant to the reckless, irresponsible activities that might lead to another meltdown. And these kinds of reforms are in the shared interest of firms on Wall Street and families on Main Street.

These have been a very tough two years. American families and businesses have paid a heavy price for failures of responsibility from Wall Street to Washington. Our task now is to move beyond these failures, to take responsibility for our future once more. That is how we will create new jobs in new industries, harnessing the incredible generative and creative capacity of our people. That is how we'll achieve greater economic security and opportunity for middle-class families in this country. That is how in this new century we will rebuild our economy stronger than ever before.

THE WHITE HOUSE

FEBRUARY 2010



# THE ANNUAL REPORT $\qquad \qquad \text{of the} \\ \text{COUNCIL OF ECONOMIC ADVISERS}$

#### LETTER OF TRANSMITTAL

Council of Economic Advisers Washington, D.C., February 11, 2010

#### Mr. President:

The Council of Economic Advisers herewith submits its 2010 Annual Report in accordance of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

Christina D. Romer

Austan Goolsbee

Member

Cecilia Elena Rouse Member



## C O N T E N T S

	Page
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

The Financial Sector	57
Housing	60
Overall Economic Activity	63
The Labor Market	68
The Challenges Ahead	72
Deteriorating Forecasts	72
The Administration Forecast	75
Responsible Policies to Spur Job Creation	78
Conclusion	79
CHAPTER 3. CRISIS AND RECOVERY IN THE WORLD ECONOMY	81
International Dimensions of the Crisis	
Spread of the Financial Shock	82
The Collapse of World Trade	87
The Collapse in Financial Flows	89
The Decline in Output Around the Globe	90
Policy Responses Around the Globe	93
Monetary Policy in the Crisis	93
Central Bank Liquidity Swaps	96
Fiscal Policy in the Crisis	98
Trade Policy in the Crisis	100
The Role of International Institutions	100
The G-20	100
The International Monetary Fund	101
The Beginning of Recovery Around the Globe	102
The Impact of Fiscal Policy	104
The World Economy in the Near Term	106
Global Imbalances in the Crisis	108
Conclusion	111
CHAPTER 4. SAVING AND INVESTMENT	113
The Path of Consumption Spending	114
The Determinants of Saving	115
Implications for Recent and Future Saving Behavior	117
The Future of the Housing Market and	
Construction	120
The Housing Market	121

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	
The Role of the Recovery Act and Other Rescue Operations	
An Anchor for Fiscal Policy	
The Effects of Budget Deficits	
Feasible Long-Run Fiscal Policies	
The Choice of a Fiscal Anchor	
Reaching the Fiscal Target	
General Principles	149
Comprehensive Health Care Reform	
Restoring Balance to the Tax Code	
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	
Types of Financial Intermediaries	
The Regulation of Financial Intermediation in the	
United States	166
Financial Crises: The Collapse of Financial	
Intermediation	170
Confidence Contagion	
Counterparty Contagion	172
Coordination Contagion	
PREVENTING FUTURE CRISES: REGULATORY REFORM	174

Promote Robust Supervision and Regulation of Financial	
Firms	175
Establish Comprehensive Regulation of Financial Markets Provide the Government with the Tools It Needs to Manage	176
Financial Crises	178
Raise International Regulatory Standards and Improve	170
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
Coveryor	211

HAPTER 8. STRENGTHENING THE AMERICAN	
ABOR 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
ND ADDRESSING CLIMATE CHANGE	235
Well-Being	
Greenhouse Gases	236
Greenwase duses	
Temperature Change	237
Temperature Change Impact on Economic Well-Being	<ul><li>237</li><li>238</li></ul>
Impact on Economic Well-Being	<ul><li>237</li><li>238</li><li>239</li></ul>
Impact on Economic Well-Being  JUMP-STARTING THE TRANSITION TO CLEAN ENERGY	<ul><li>237</li><li>238</li><li>239</li><li>243</li></ul>
Impact on Economic Well-Being  JUMP-STARTING THE TRANSITION TO CLEAN ENERGY  Recovery Act Investments in Clean Energy	<ul><li>237</li><li>238</li><li>239</li><li>243</li></ul>
Impact on Economic Well-Being  JUMP-STARTING THE TRANSITION TO CLEAN ENERGY  Recovery Act Investments in Clean Energy  Short-Run Macroeconomic Effects of the Clean Energy	237 238 239 243 243
Impact on Economic Well-Being  JUMP-STARTING THE TRANSITION TO CLEAN ENERGY  Recovery Act Investments in Clean Energy  Short-Run Macroeconomic Effects of the Clean Energy Investments	237 238 239 243 243
Impact on Economic Well-Being  JUMP-STARTING THE TRANSITION TO CLEAN ENERGY  Recovery Act Investments in Clean Energy  Short-Run Macroeconomic Effects of the Clean Energy	237 238 239 243 243 246
Impact on Economic Well-Being	237 238 239 243 243 246
Impact on Economic Well-Being  JUMP-STARTING THE TRANSITION TO CLEAN ENERGY  Recovery Act Investments in Clean Energy  Short-Run Macroeconomic Effects of the Clean Energy Investments  Other Domestic Actions to Mitigate Climate	237 238 239 243 243 246 247
Impact on Economic Well-Being  JUMP-STARTING THE TRANSITION TO CLEAN ENERGY	237 238 239 243 243 246 247 248
Impact on Economic Well-Being	237 238 239 243 243 246 247 248

	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
СН	APTER 10. FOSTERING PRODUCTIVITY GROWTH	
TH	ROUGH 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 $\dots$	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
REI	FERENCES	285
	APPENDIXES	
Α	A. Report to the President on the Activities of the Council of	
	Economic Advisers During 2009	305
В		
	Production	319

#### LIST OF FIGURES

1-1.	House Prices Adjusted for Inflation	27
1-2.	Monthly Change in Payroll Employment	28
1-3.	Personal Consumption Expenditures as a Share of GDP	30
1-4.	Actual and Projected Budget Surpluses in January 2009	
	under Previous Policy	31
1-5.	Real Median Family Income	33
1-6.	Total Compensation Including and Excluding Health	
	Insurance	34
1-7.	Mean Years of Schooling by Birth Cohort	36
1-8.	R&D Spending as a Percent of GDP	37
2-1.	House Prices Adjusted for Inflation	40
2-2.	Income and Consumption Around the 2008 Tax Rebate	42
2-3.	TED Spread and Moody's BAA-AAA Spread Through	
	December 2008	43
2-4.	Assets on the Federal Reserve's Balance Sheet	48
2-5.	TED Spread and Moody's BAA-AAA Spread Through	
	December 2009	57
2-6.	S&P 500 Stock Price Index	58
2-7.	Monthly Gross SBA 7(a) and 504 Loan Approvals	60
2-8.	30-Year Fixed Rate Mortgage Rate	61
2-9.	FHFA and LoanPerformance National House Price Indexes	63
2-10.	Real GDP Growth	64
2-11.	Real GDP: Actual and Statistical Baseline Projection	65
2-12.	Contributions to Real GDP Growth	66
2-13.	Average Monthly Change in Employment	68
2-14.	Estimated Effect of the Recovery Act on Employment	69
2-15.	Contributions to the Change in Employment	71
2-16.	Okun's Law, 2000-2009	74
3-1.	Interbank Market Rates	83
3-2.	Nominal Trade-Weighted Dollar Index	85
3-3.	OECD Exports-to-GDP Ratio	87
3-4.	Vertical Specialization and the Collapse in Trade	88
3-5.	Cross-Border Gross Purchases and Sales of Long-Term	
	Assets	90
3-6.	Industrial Production in Advanced Economies	91
3-7.	Industrial Production in Emerging Economies	92
3-8.	Headline Inflation, 12-Month Change	93
3-9.	Policy Rates in Economies with Major Central Banks	94

3-10.	Change in Central Bank Assets	95
3-11.	Central Bank Liquidity Swaps of the Federal Reserve	97
3-12.	Tax Share and Discretionary Stimulus	99
3-13.	Outperforming Expectations and Stimulus	105
3-14.	OECD Countries: GDP and Unemployment	108
3-15.	Current Account Deficits or Surpluses	110
4-1.	Personal Consumption Expenditures as a Share of GDP	114
4-2.	Personal Saving Rate Versus Wealth Ratio	115
4-3.	Personal Saving Rate: Actual Versus Model	118
4-4.	Actual Personal Saving Versus Counterfactual Personal	
	Saving	119
4-5.	Single-Family Housing Starts	121
4-6.	Homeownership Rate	122
4-7.	Fixed Investment in Structures by Type	124
4-8.	Commercial Real Estate Prices and Loan Delinquencies	125
4-9.	Nonstructures Investment as a Share of Nominal GDP	128
4-10.	Saving, Investment, and the Current Account as a Percent	
	of GDP	132
4-11.	Growth of U.S. Exports and Rest-of-World Income:	
	1960-2008	134
5-1.	Actual and Projected Budget Surpluses in January 2009	
	under Previous Policy	138
5-2.	Actual and Projected Government Debt Held by the Public	
	under Previous Policy	139
5-3.	Budgetary Cost of Previous Administration Policy	141
5-4.	Causes of Rising Spending on Medicare, Medicaid, and	
	Social Security	142
5-5.	Budget Comparison: January 2001 and January 2009	143
5-6.	Effect of the Recovery Act on the Deficit	144
5-7.	Top Statutory Tax Rates	153
5-8.	Evolution of Average Tax Rates	154
6-1.	Financial Intermediation: Saving into Investment	161
6-2.	Financial Sector Assets	163
6-3.	Share of Financial Sector Assets by Type	164
6-4.	Confidence Contagion	171
6-5.	Counterparty Contagion	173
6-6.	Coordination Contagion	174
7-1.	National Health Expenditures as a Share of GDP	183
7-2.	Total Compensation Including and Excluding Health	
	Incurance	184

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
0-1.	Non-Farm Labor Productivity and Per Capita Income	261
0-2.	Labor Productivity Growth since 1947	262
0-3.	R&D Spending as a Percent of GDP	270
0-4.	Exports as a Share of GDP	275
0-5.	Intra-Industry Trade, U.S. Manufacturing	278
	LIST OF TABLES	
	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
9-3.	The European Union's Experience with Emissions Trading	252
10-1.	Overview of the Administration's Innovation Agenda	266



#### CHAPTER 1

### TO RESCUE, REBALANCE, AND REBUILD

President Obama took office at a time of economic crisis. The recession that began in December 2007 had accelerated following the financial crisis in September 2008. By January 2009, 11.9 million people were unemployed and real gross domestic product (GDP) was falling at a breakneck pace. The possibility of a second Great Depression was frighteningly real.

In the first months of the Administration, the President and Congress took unprecedented actions to restore demand, stabilize financial markets, and put people back to work. Just 28 days after his inauguration, the President signed the American Recovery and Reinvestment Act of 2009, the boldest countercyclical fiscal stimulus in American history. The Financial Stability Plan, announced in February, included wide-ranging measures to strengthen the banking system, increase consumer and business lending, and stem foreclosures and support the housing market. These and a host of other actions stabilized the financial system, supported those most directly affected by the recession, and walked the economy back from the brink.

But the Administration always knew that stabilizing the economy would not be enough. The problems that led to the crisis were years in the making. Continued action will be necessary to return the economy to full employment. In the process, an important rebalancing will need to occur. For too many years, America's growth and prosperity were fed by a boom in consumer spending stemming from rising asset prices and easy credit. The Federal Government had likewise been living beyond its means, resulting in large and growing budget deficits. And our regulatory system had failed to keep up with financial innovation, allowing risky practices to endanger the system and the economy. For this reason, the Administration has sought to help restore the economy to health on a foundation of greater investment, fiscal responsibility, and a well-functioning and secure financial system.

Even this important rebalancing would not be sufficient. In addition to the problems that had set the stage for the crisis, long-term challenges had been ignored and the U.S. economy was failing at some of its central tasks. Our health care system was beset by steadily rising costs, and millions of Americans either had no health insurance at all or were unsure whether their coverage would be there when they needed it. Middle-class families had seen their real incomes stagnate during the previous eight years, while those at the top of the income distribution had seen their incomes soar. A failure to slow the consumption of fossil fuels had contributed to global warming and continued dependence on foreign oil. And a country built on its record of innovation was failing to invest enough in research and development.

The President has dedicated his Administration to dealing with these long-run problems as well. As the new decade opens, Congress has come closer than ever before to passing landmark legislation reforming the health insurance system. This legislation would make health insurance more secure for those who have it and affordable for those who do not, and it would slow the growth rate of health care costs. Over the past year, the Administration has also worked with Congress to make important new investments to sustain and improve K-12 education and community colleges, jump-start the transition to a clean energy economy, and spur innovation through increased research and development. These and numerous other initiatives will help to rebuild the American economy stronger than before and put us on the path to sustained growth and prosperity. Enacting these policies will help to ensure that our children and grandchildren inherit a country as full of promise and as economically secure as ever in our history.

#### RESCUING AN ECONOMY IN FREEFALL

In December 2007, the American economy entered what at first seemed likely to be a mild recession. As Figure 1-1 shows, real house prices (that is, house prices adjusted for inflation) had risen to unprecedented levels, almost doubling between 1997 and 2006. The rapid run-up in prices was accompanied by a residential construction boom and the proliferation of complex mortgages and mortgage-related financial assets. The fall of national house prices starting in early 2007, and the associated declines in the values of mortgage-backed and other related assets, led to a slowdown in the growth of consumer spending, increases in mortgage defaults and home foreclosures, significant strains on financial institutions, and reduced credit availability.

Figure 1-1 House Prices Adjusted for Inflation

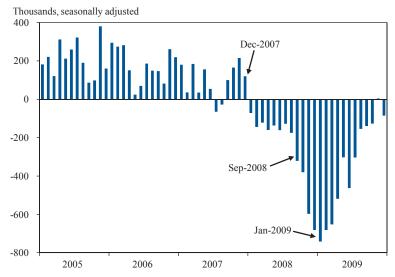


Sources: Shiller (2005); recent data from http://www.econ.yale.edu/~shiller/data/Fig2-1.xls.

By early 2008, the economy was contracting. Employment fell by an average of 137,000 jobs per month over the first eight months of 2008. Real GDP rose only anemically from the third quarter of 2007 to the second quarter of 2008.

Then in September 2008, the character of the downturn worsened dramatically. The collapse of Lehman Brothers and the near-collapse of American International Group (AIG) led to a seizing up of financial markets and plummeting consumer and business confidence. Parts of the financial system froze, and assets once assumed to be completely safe, such as moneymarket mutual funds, became unstable and subject to runs. Credit spreads, a common indicator of credit market stress, spiked to unprecedented levels in the fall of 2008. The value of the stock market plunged 24 percent in September and October, and another 15 percent by the end of January. As Figure 1-2 shows, over the final four months of 2008 and the first month of 2009, the economy lost, on average, a staggering 544,000 jobs per month, the highest level of job loss since the demobilization at the end of World War II. Real GDP fell at an increasingly rapid pace: an annual rate of 2.7 percent in the third quarter of 2008, 5.4 percent in the fourth quarter of 2008, and 6.4 percent in the first quarter of 2009.

Figure 1-2 Monthly Change in Payroll Employment



Source: Department of Labor (Bureau of Labor Statistics), Current Employment Statistics survey Series CES0000000001.

#### Rescuing the Economy from the Great Recession

Thus, the first imperative of the new Administration upon taking office had to be to turn around an economy in freefall. Chapter 2 describes the unprecedented policy actions the Administration has taken, together with Congress and the Federal Reserve, to address the immediate crisis. The large fiscal stimulus in the American Recovery and Reinvestment Act, the programs to stabilize financial markets and restart lending, and the policies to assist small businesses and distressed homeowners have all played a role in generating one of the sharpest economic turnarounds in post–World War II history. Real GDP is growing again, job loss has moderated greatly, house prices appear to have stabilized, and credit spreads have almost returned to normal levels. A wide range of evidence indicates that in the absence of the aggressive policy actions, the recession and the attendant suffering of ordinary Americans would have been far more severe and could have led to catastrophe.

Yet, because the economy's downward momentum was so great and the barriers to robust growth from the weakened financial conditions of households and financial institutions are so strong, the economy remains distressed and many families continue to struggle. A change from freefall to growing GDP and moderating job losses is a dramatic improvement, but it is not nearly enough. Chapter 2 therefore also examines the challenges that remain in achieving a full recovery. It discusses some possible additional measures to spur private sector job creation.

#### Crisis and Recovery in the World Economy

In the early fall of 2008, there was hope that the impact of the crisis on the rest of the world would be limited. Those hopes were dashed during the months that followed. In the fourth quarter of 2008 and the first quarter of 2009, real GDP fell sharply—often at double-digit rates—in the United Kingdom, Germany, Japan, Taiwan, and elsewhere. The surprisingly rapid spread of the downturn to the rest of the world reduced the demand for U.S. exports sharply, and so magnified our economic contraction.

The worldwide crisis required a worldwide response. Chapter 3 describes both the actions taken by individual countries and those taken through international institutions and cooperation. As described in the leaders' statement from the September summit of the Group of Twenty (G-20) nations, the result was "the largest and most coordinated fiscal and monetary stimulus ever undertaken" (Group of Twenty 2009). Just as the actions in the United States have begun to turn the domestic economy around, these international actions appear to have put the worst of the global crisis behind us. But the firmness of the budding recovery varies considerably across countries, and significant challenges still remain.

#### REBALANCING THE ECONOMY ON THE PATH TO FULL EMPLOYMENT

The path from budding recovery to full employment will surely be a difficult one. The problems that sowed the seeds of the financial crisis need to be dealt with so that the economy emerges from the recession with a stronger, more durable prosperity. There needs to be a rebalancing of the economy away from low personal saving and large government budget deficits and toward investment. Our financial system must be strengthened both to provide the lending needed to support the recovery and to reduce the risk of future crises.

#### Saving and Investment

The expansion of the 2000s was fueled in part by high consumption. As Figure 1-3 shows, the share of GDP that takes the form of consumption has been on a generally upward trend for decades and reached unprecedented heights in the 2000s. The personal saving rate fell to exceptionally low levels, and trade deficits were large and persistent. A substantial amount of the remainder of GDP took the form of housing construction, which may have crowded out other kinds of investment. Such an expansion is not just unstable, as we have learned painfully over the past two years. It also contributes too little to increases in standards of living. Low investment in equipment and factories slows the growth of productivity and wages.

Percent 

Figure 1-3
Personal Consumption Expenditures as a Share of GDP

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.10.

Chapter 4 examines the transition from consumption-driven growth to a greater emphasis on investment and exports. It discusses the likelihood that consumers will return to saving rates closer to the postwar average than to the very low rates of the early 2000s. It also describes the Administration's initiatives to encourage household saving. Greater personal saving will tend to encourage investment by helping to maintain low real interest rates. The increased investment will help to fill some of the gap in demand left by reduced consumption. Chapter 4 discusses additional Administration policies, such as investment tax incentives, designed to promote private investment. Higher saving relative to investment will reduce net international capital flows to the United States. Because net foreign borrowing must equal the current account deficit, lower net capital inflows imply a closer balance of exports and imports, which will help create further demand for American products. The Administration also supports aggressive export promotion measures to further increase demand for our exports. The end

result of this rebalancing will be an economy that is more stable, more investment-oriented, and more export-oriented, and thus better for our future standards of living.

#### Addressing the Long-Run Fiscal Challenge

A key part of the rebalancing that must occur as the economy returns to full employment and beyond involves taming the Federal budget deficit. Figure 1-4 shows the actual and projected path of the budget surplus based on estimates released by the Congressional Budget Office (CBO) in January 2009, just before President Obama took office. As the figure makes clear, the budget surpluses of the late 1990s turned to substantial deficits in the 2000s, and the deficits were projected to grow even more sharply over the next three decades. As discussed in Chapter 5, the change to deficits in the 2000s largely reflects policy actions that were not paid for, such as the 2001 and 2003 tax cuts and the introduction of the Medicare prescription drug benefit. The projection of steadily increasing future deficits is largely due to the continuation of the decades-long trend of rising health care costs.

Percent of GDP Actual Projected 0 -5 -10-15 -20 1990 2000 2010 2020 2030 2040

Figure 1-4 Actual and Projected Budget Surpluses in January 2009 under Previous Policy

Note: CBO baseline surplus projection adjusted for CBO's estimates of costs of continued war spending, continuation of the 2001 and 2003 tax cuts, preventing scheduled cuts in Medicare's physician payment rates, and holding other discretionary outlays constant as a share of GDP.

Sources: Congressional Budget Office (2009a, 2009b).

Chapter 5 describes the likely consequences of these projected deficits over time and the importance of restoring fiscal discipline. It also discusses the President's plan for facing this challenge. A period of severe economic weakness is no time for a large fiscal contraction. Instead, the Nation must tackle the long-run deficit problem through actions that address the underlying sources of the problem over time. The single most important step that can be taken to reduce future deficits is to adopt health care reform that slows the growth rate of costs without compromising the quality of care. In addition, the President's fiscal 2011 budget includes other significant measures, such as allowing President Bush's tax cuts for the highest-income earners to expire, reforming international tax rules to discourage tax avoidance and encourage investment in the United States, and imposing a three-year freeze in nonsecurity discretionary spending; alongside a proposal for a bipartisan commission process to address the long-run gap between revenues and expenditures.

# Building a Safer Financial System

Risky credit practices both encouraged some of the imprudent rise in consumption and homebuilding in the previous decade and set the stage for the financial crisis. Chapter 6 analyzes the role that financial intermediaries play in the economy and diagnoses what went wrong during the meltdown of financial markets. The crisis showed that the Nation's financial regulatory structure, much of which had not been fundamentally changed since the 1930s, failed to keep up with the evolution of financial markets. The current system provided too little protection for the economy from actions that could threaten financial stability and too little protection for ordinary Americans in their dealings with sophisticated and powerful financial institutions and other providers of credit. Strengthening our financial system is thus a key element of the rebalancing needed to assure stable, robust growth.

Chapter 6 discusses financial regulatory modernization. What is needed is a system where capital requirements and sensible rules are set in a way to control excessive risk-taking; where regulators can consider risks to the system as a whole and not just to individual institutions; where institutions cannot choose their regulators; where regulators no longer face the unacceptable choice between the disorganized, catastrophic failure of a financial institution and a taxpayer-funded bailout; and where a dedicated agency has consumer protection as its central mandate. For this reason, the President put forward a comprehensive plan for financial regulatory reform last June and is working with Congress to ensure passage of these critical reforms this year.

## REBUILDING A STRONGER ECONOMY

Even before the crisis, the economy faced significant long-term challenges. As a result, it was doing poorly at providing rising standards of living for the vast majority of Americans. Figure 1-5 shows the evolution of before-tax real median family income since 1960. Beginning around 1970, slower productivity growth and rising income inequality caused incomes for most families to grow only slowly. After a half-decade of higher growth in the 1990s, the real income of the typical American family actually fell between 2000 and 2006.

2008 dollars 70,000 60,000 50,000 40,000 30,000 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005

Figure 1-5 Real Median Family Income

Notes: Income measure is total money income excluding capital gains and before taxes. Annual income deflated using CPI-U-RS.

Source: Department of Commerce (Census Bureau), Current Population Survey, Annual Social and Economic Supplement, Historical Income Table F-12.

A central focus of Administration policy both over the past year and for the years to come is to build a firmer foundation for the economy. The President is committed to policies that will raise living standards for all Americans.

# Reforming Health Care

Health care is a key challenge that long predates the current economic crisis. The existing system has left many Americans who have health insurance inadequately covered, poorly protected against insurance industry abuses, and fearful of losing the insurance they have. And it has left tens of millions of Americans with no insurance coverage at all. The system also delivers too little benefit at too high a cost. Comparisons across countries and, especially, across regions of the United States reveal large differences in health care spending that are not associated with differences in health outcomes and that cannot be fully explained by factors such as differences in demographics, health status, income, or medical care prices. These large differences in spending suggest that up to nearly 30 percent of health care spending could be saved without adverse health consequences. The unnecessary growth of health care costs is eroding the growth of take-home pay and is central to our long-run fiscal challenges. These adverse effects will only become more severe if cost growth is not slowed.

To illustrate what could happen to workers' earnings in the absence of reform, Figure 1-6 shows the historical and projected paths of real total compensation per worker (which includes nonwage benefits such as health insurance) and total compensation net of health insurance premiums. As health insurance premiums absorb a growing fraction of workers' compensation, the remaining portion of compensation levels off and then starts to decline.

2008 dollars per person 120,000 Actual Projected 110.000 Estimated annual total compensation 100,000 90,000 80.000 70,000 60,000 Estimated annual total compensation 50.000 net of health insurance premiums 40,000 30,000 2019 2003 2007 2011 2015 2023 2027 2031 2035 2039

Figure 1-6
Total Compensation Including and Excluding Health Insurance

Note: Health insurance premiums include the employee- and employer-paid portions. Sources: Actual data from Department of Labor (Bureau of Labor Statistics); Kaiser Family Foundation and Health Research and Educational Trust (2009); Department of Health and Human Services (Agency for Healthcare Research and Quality, Center for Financing, Access, and Cost Trends), 2008 Medical Expenditure Panel Survey-Insurance Component. Projections based on CEA calculations.

Chapter 7 describes the actions the Administration and Congress took in 2009 to begin the process of improvement, including an expansion of the Children's Health Insurance Program to provide access to health care for millions of children and important investments in the modernization of the health care system through the Recovery Act. It also describes the key elements of successful health insurance reform and discusses the progress that has been made on reform legislation. Successful reform involves making insurance more secure for those who have it and expanding coverage to those who lack it. It must include delivery system reforms, reductions in waste and improper payments in the Medicare system, and changes in consumer and firm incentives that will slow the growth rate of costs substantially, while maintaining and even improving quality. Slowing the growth rate of health care costs will have benefits throughout the economy: it will raise standards of living for families, help reduce the Federal budget deficit relative to what it otherwise would be, benefit state and local governments, and encourage job growth and improved macroeconomic performance.

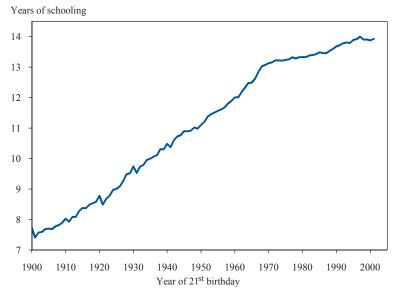
## Strengthening the American Labor Force

American workers have suffered greatly in the current recession. As described in Chapter 8, long-term unemployment is at record levels. The unemployment rate, which was 10 percent for the country as a whole in December, is far higher for blacks, Hispanics, and other demographic groups. The decline in house prices has eroded the nest eggs that many Americans had been counting on for their retirement. The Administration has initiated many actions to help support workers and their families through the recession and beyond. These actions range from extended and expanded unemployment insurance, to measures to make health insurance more affordable, to initiatives to promote retirement saving.

American workers also face the persistent problem of stagnating incomes. A key determinant of growth in standards of living is the rate of increase in the education and skills of our workforce. More and more jobs require education and training beyond the high school level, along with the ability to complete tasks that are open-ended and interactive. But, as Figure 1-7 shows, the years of education U.S. workers have brought to the labor market have risen little in the past four decades. And, as is well known, U.S. students lag behind those from many other countries in their performance on standardized tests.

Chapter 8 describes the Administration's initiatives to improve the skills of our workers. The Administration is pursuing reform to eliminate wasteful subsidies to student loan providers, the savings from which will fund new investments in education. The Administration has proposed a major initiative to support and improve community colleges, which are a neglected but critical link in our education system. It has also proposed increasing Pell Grants, and is taking steps to simplify the student aid application process so that eligible students are no longer discouraged by a complicated process from even applying for aid. All of these actions will help to achieve one of the President's key educational goals for the country—that the proportion of adults with a college degree be the largest in the world by 2020.

Figure 1-7 Mean Years of Schooling by Birth Cohort



Notes: Years of schooling at 30 years of age. Methodology described in Goldin and Katz (2007).

Sources: Department of Commerce (Bureau of the Census), 1940-2000 Census IPUMS, 2005

# Transforming the Energy Sector and Addressing Climate Change

Climate change and energy independence present a very different long-run challenge. Continued reliance on fossil fuels is leading to the buildup of greenhouse gases in the atmosphere and is changing our climate. Left unaddressed, these trends will have increasingly severe consequences over time. What is more, the United States imports the majority of the oil it uses, much of it from sources that are potentially subject to disruption.

Chapter 9 analyzes how economic policy can play a critical role in moving the United States toward a clean energy economy that is less dependent on fossil fuels and fossil fuel imports. Slowing climate change requires

CPS MORG; Goldin and Katz (2007).

slowing the emission of greenhouse gases. A market-based approach, such as that supported by the Administration and currently working its way through Congress, can provide the signals needed to accomplish this slowing of emissions efficiently and with minimal disruptions.

The support for research and development (R&D) and incentives for investment in clean energy technologies and energy efficiency in the Recovery Act and the President's budget, as well as in the energy and climate legislation, can help foster the transition to a clean energy economy and spur growth in vital new industries. These new industries have the potential to reinvigorate the American manufacturing sector and generate secure, high-quality jobs.

# Fostering Productivity Growth Through Innovation and Trade

The ultimate driver of growth in average standards of living is productivity growth. Increased investment in capital and in the skills of our workforce are two important sources of that growth. Chapter 10 examines two other sources of productivity gains: innovation and international trade.

Innovation comes from many sources. But a central one is investment in R&D. Figure 1-8 shows the share of GDP devoted to R&D over the past 50 years. In the mid-1960s, R&D constituted a larger share of total spending

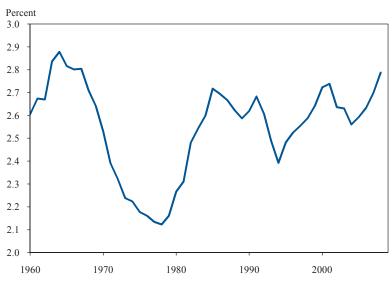


Figure 1-8 R&D Spending as a Percent of GDP

Note: Data for 2008 are preliminary.

Sources: National Science Foundation, Science and Engineering Indicators 2010 Tables 4-1 and 4-7.

than it has in the past decade. And in some other countries, such as Korea, Sweden, and Japan, R&D spending is a larger fraction of GDP than in the United States. The President is committed to raising the share of output devoted to R&D to 3 percent, so that America can continue to be a leader in new technologies and American workers and businesses can benefit from more rapid economic growth.

Through the Recovery Act and other measures, the Administration is investing both directly in basic scientific research and development and in the infrastructure to support that research. Most innovation, however, comes from the private sector. Here, the Administration is providing critical incentives for R&D both in general and in such vital areas as clean energy technologies. The Administration is also pursuing a wide range of policies to support the small businesses that contribute so much to technological progress—policies ranging from programs to maintain the flow of credit to small businesses to health insurance reform that will help level the playing field between small and large businesses.

Finally, international trade can be an important source of productivity growth and incentives for innovation. Trade has the potential to allow the U.S. economy to expand output in areas where it is more productive and to enable higher-productivity firms to expand. Access to a world market encourages American firms to invest in the research needed to become technological leaders. Through these routes, a free and fair trade regime can play an important part in lifting living standards in the long run. But for trade to play this role, it is essential to enforce existing trade rules and pursue policies that ensure that the benefits of trade are widely shared.

## Conclusion

The past year has been one of great challenge for all Americans. Nearly every family has been touched in some way by the fallout from the crisis in financial markets, the drying up of credit, and the rise in unemployment. These challenges, moreover, have come after a decade in which ordinary Americans have seen their living standards stagnate, their health insurance become less secure, and their environment deteriorate.

The rest of this Report describes in more detail the actions the President has taken to end the recession, foster stable growth by rebalancing production and demand, and rebuild the foundation of the American economy. More fundamentally, it describes the work that remains to be done to create the prosperous, dynamic economy the American people need and deserve.



## CHAPTER 2

# RESCUING THE ECONOMY FROM THE GREAT RECESSION

The first and most fundamental task the Administration faced when President Obama took office was to rescue an economy in freefall. In November 2008, employment was declining at a rate of more than half a million jobs per month, and credit markets were stretched almost to the breaking point. As the economy entered 2009, the decline accelerated, with job loss in January reaching almost three-quarters of a million. The President responded by working with Congress to take unprecedented actions. These steps, together with measures taken by the Federal Reserve and other financial regulators, have succeeded in stabilizing the economy and beginning the process of healing a severely shaken economic and financial system. But much work remains. With high unemployment and continued job losses, it is clear that recovery must remain the key focus of 2010.

#### AN ECONOMY IN FREEFALL

According to the National Bureau of Economic Research, the United States entered a recession in December 2007. Unlike most postwar recessions, this downturn was not caused by tight monetary policy aimed at curbing inflation. Although economists will surely analyze this downturn extensively in the years to come, there is widespread consensus that its central precipitating factor was a boom and bust in asset prices, especially house prices. The boom was fueled in part by irresponsible and in some cases predatory lending practices, risky investment strategies, faulty credit ratings, and lax regulation. When the boom ended, the result was widespread defaults and crippling blows to key financial institutions, magnifying the decline in house prices and causing enormous spillovers to the remainder of the economy.

## The Run-Up to the Recession

The rise in house prices during the boom was remarkable. As Figure 2-1 shows, real house prices almost doubled between 1997 and 2006. By 2006, they were more than 50 percent above the highest level they had reached in the 20th century.

Index (1900=100)

200

175

150

100

75

1909 1919 1929 1939 1949 1959 1969 1979 1989 1999 2009

Figure 2-1 House Prices Adjusted for Inflation

Sources: Shiller (2005); recent data from http://www.econ.yale.edu/~shiller/data/Fig2-1.xls.

Stock prices also rose rapidly. The Standard and Poor's (S&P) 500, for example, rose 101 percent between its low in 2002 and its high in 2007. That rise, though dramatic, was not unprecedented. Indeed, in the five years before its peak in March 2000, during the "tech bubble," the S&P 500 rose 205 percent, while the more technology-focused NASDAQ index rose 506 percent.

The run-up in asset prices was associated with a surge in construction and consumer spending. Residential construction rose sharply as developers responded to the increase in housing demand. From the fourth quarter of 2001 to the fourth quarter of 2005, the residential investment component of real GDP rose at an average annual rate of nearly 8 percent. Similarly, consumers responded to the increases in the value of their assets by continuing to spend freely. Saving rates, which had been declining since the early 1980s, fell to about 2 percent during the two years before the recession. This spending was facilitated by low interest rates and easy credit, with household borrowing rising faster than incomes.

#### The Downturn

House prices began to drop in some markets in 2006, and then nationally beginning in 2007. This process was gradual at first, with prices measured using the LoanPerformance house price index declining just 3½ percent nationally between January and June 2007. Lenders had lent aggressively during the boom, often providing mortgages whose soundness hinged on continued house price appreciation. As a result, the comparatively modest decline in house prices threatened large losses on subprime residential mortgages (the riskiest class of mortgages), as well as on the slightly higher-quality "Alt-A" mortgages. As the availability of mortgage credit tightened, the downward pressure on real estate prices intensified. National house prices declined 6 percent between June and December 2007.

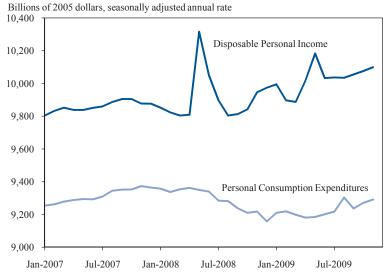
The negative feedback between credit availability and the housing market weighed on household and business confidence, restraining consumer spending and business investment. Although residential construction led the slowdown in real activity through 2007, by early 2008 outlays for consumer goods and services and business equipment and software had decelerated sharply, and total employment was beginning to decline. Real gross domestic product (GDP) fell slightly in the first quarter of 2008.

In February 2008, Congress passed a temporary tax cut. Figure 2-2 shows real after-tax (or disposable) income and consumer spending before and after rebate checks were issued. Consumption was maintained despite a tremendous decline in household wealth over the same period. Total household and nonprofit net worth declined 9.1 percent between June 2007 and June 2008. Microeconomic studies of consumer behavior in this episode confirm the role of the tax rebate in maintaining spending (Broda and Parker 2008; Sahm, Shapiro, and Slemrod 2009). The fact that real GDP reversed course and grew in the second quarter of 2008 is further tribute to the helpfulness of the policy. But, in part because of the lack of robust, sustained stimulus, growth did not continue.

Financial institutions had invested heavily in assets whose values were tied to the value of mortgages. For many reasons—the opacity of the instruments, the complexity of financial institutions' balance sheets and their "off-balance-sheet" exposures, the failure of credit-rating agencies to accurately identify the riskiness of the assets, and poor regulatory oversight—the extent of the institutions' exposure to mortgage default risk was obscured. When mortgage defaults rose, the result was unexpectedly large losses to many financial institutions.

In the fall of 2008, the nature of the downturn changed dramatically. More rapid declines in asset prices generated further loss of confidence in the ability of some of the world's largest financial institutions to honor

Figure 2-2 Income and Consumption Around the 2008 Tax Rebate



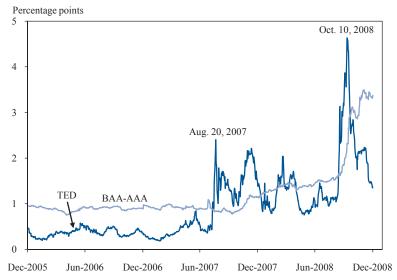
Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 2.6, line 30, and Table 2.8.6, line 1.

their obligations. In September, the Lehman Brothers investment bank declared bankruptcy, and other large financial firms (including American International Group, Washington Mutual, and Merrill Lynch) were forced to seek government aid or to merge with stronger institutions. What followed was a rush to liquidity and a cascading of retrenchment that had many of the features of a classic financial panic.

Risk spreads shot up to extraordinary levels. Figure 2-3 shows both the TED spread and Moody's BAA-AAA spread. The TED spread is the difference between the rate on short-term loans among banks and a safe short-term Treasury interest rate. The BAA-AAA spread is the difference between the interest rates on high-grade and medium-grade corporate bonds. Both spreads rose dramatically during the heart of the panic. Indeed, one way to put the spike in the BAA-AAA spread in perspective is to note that the same spread barely moved during the Great Crash of the stock market in 1929, and rose by only about half as much during the first wave of banking panics in 1930 as it did in the fall of 2008.

The same loss of confidence shown by the rise in credit spreads translated into declining asset prices of all sorts. The S&P 500 declined 29 percent in the second half of 2008. Real house prices tumbled another 11 percent over the same period (see Figure 2-1). All told, household and

Figure 2-3 TED Spread and Moody's BAA-AAA Spread Through December 2008



Notes: The TED spread is defined as the three-month London Interbank Offered Rate (Libor) less the yield on the three-month U.S. Treasury security. Moody's BAA-AAA spread is the difference between Moody's indexes of yields on AAA and BAA rated corporate bonds.

Source: Bloomberg.

nonprofit net worth declined 20 percent between December 2007 and December 2008, or by about \$13 trillion. Again, a useful way to calibrate the size of this shock is to note that in 1929, household wealth declined only 3 percent—about one-seventh as much as in 2008. This is another indication that the shocks hitting the U.S. economy in 2008 were enormous.

The decline in wealth had a severe impact on consumer spending. This key component of aggregate demand, which accounts for roughly 70 percent of GDP and is traditionally quite stable, declined at an annual rate of 3.5 percent in the third quarter of 2008 and 3.1 percent in the fourth quarter. Some of this large decline may have also reflected the surge in uncertainty about future incomes. Not only did asset prices fall sharply, leading to the decline in wealth; they also became dramatically more volatile. The standard deviation of daily stock returns in the fourth quarter, for example, was 4.3 percentage points, even larger than in the first months of the Great Depression.

The financial panic led to a precipitous decline in lending. Bank credit continued to rise over the latter portion of 2008, as households and firms that had lost access to other forms of credit turned to banks. However, bank loans declined sharply in the first and second quarters of 2009 as banks tightened their terms and standards. Other sources of credit showed even

more substantial declines. One particularly important market is that for commercial paper (short-term notes issued by firms to finance key operating costs such as payroll and inventory). The market for lower-tier nonfinancial (A2/P2) commercial paper collapsed in the fall of 2008, with the average daily value of new issues falling from \$8.0 billion in the second quarter of 2008 to \$4.3 billion in the fourth quarter. In addition, securitization of automobile loans, credit card receivables, student loans, and commercial mortgages ground to a halt.

This freezing of credit markets, together with the decline in wealth and confidence, caused consumer spending and residential investment to fall sharply. Real GDP declined at an annual rate of 2.7 percent in the third quarter of 2008, 5.4 percent in the fourth quarter, and 6.4 percent in the first quarter of 2009. Industrial production, which had been falling steadily over the first eight months of 2008, plummeted in the final four months dropping at an annual rate of 18 percent.

Many industries were battered by the financial crisis and the resulting economic downturn. The American automobile industry was hit particularly hard. Sales of light motor vehicles, which had exceeded 16 million units every year from 1999 to 2007, fell to an annual rate of only 9.5 million in the first quarter of 2009. Employment in the motor vehicle and parts industry declined by 240,000 over the 12 months through January 2009. Two domestic manufacturers, General Motors (GM) and Chrysler, required emergency loans in late December 2008 and early January 2009 to avoid disorderly bankruptcy.

The most disturbing manifestation of the rapid slowdown in the economy was the dramatic increase in job loss. Over the first months of 2008, job losses were typically between 100,000 and 200,000 per month. In October, the economy lost 380,000 jobs; in November, 597,000 jobs. By January, the economy was losing jobs at a rate of 741,000 per month. Commensurate with this terrible rate of job loss, the unemployment rate rose rapidly—from 6.2 percent in September 2008 to 7.7 percent in January 2009. It then continued to rise by roughly one-half of a percentage point per month through the winter and spring; it reached 9.4 percent in May, and ended the year at 10.0 percent.

#### Wall Street and Main Street

As described in more detail later, policymakers have focused much of their response to the crisis on stabilizing the financial system. Many Americans are troubled by these policies. Because to a large extent it was the actions of credit market participants that led to the crisis, people ask why policymakers should take actions focused on restoring credit markets.

The basic reason for these policies is that the health of credit markets is critically important to the functioning of our economy. Large firms use commercial paper to finance their biweekly payrolls and pay suppliers for materials to keep production lines going. Small firms rely on bank loans to meet their payrolls and pay for supplies while they wait for payment of their accounts receivable. Home purchases depend on mortgages; automobile purchases depend on car loans; college educations depend on student loans; and purchases of everyday items depend on credit cards.

The events of the past two years provide a dramatic demonstration of the importance of credit in the modern economy. As the President said in his inaugural address, "Our workers are no less productive than when this crisis began. Our minds are no less inventive, our goods and services no less needed." Yet developments in financial markets—rises and falls in home and equity prices and in the availability of credit—have led to a collapse of spending, and hence to a precipitous decline in output and to unemployment for millions.

Numerous academic studies before the crisis had also shown that the availability of credit is critical to investment, hiring, and production. One study, for example, found that when a parent company earns high profits and so has less need to rely on credit, the additional funds lead to higher investment by subsidiaries in completely unrelated lines of business (Lamont 1997). Another found that when a small change in a firm's circumstances frees up a large amount of funds that would otherwise have to go to pension contributions, the result is a large change in spending on capital goods (Rauh 2006). Other studies have shown that when the Federal Reserve tightens monetary policy, small firms, which typically have more difficulty obtaining financing, are hit especially hard (Gertler and Gilchrist 1994), and firms without access to public debt markets cut their inventories much more sharply than firms that have such access (Kashyap, Lamont, and Stein 1994).

Research before the crisis had also found that financial market disruptions could affect the real economy. Ben Bernanke, who is now Chairman of the Federal Reserve, demonstrated a link between the disruption of lending caused by bank failures and the worsening of the Great Depression (Bernanke 1983). A smaller but more modern example is provided by the impact of Japan's financial crisis in the 1990s on the United States: construction lending, new construction, and construction employment were more adversely affected in U.S. states where subsidiaries of Japanese banks had a larger role, and thus where credit availability was more affected by the collapse of Japan's bubble (Peek and Rosengren 2000). That a financial disruption in a trading partner can have a detectable adverse impact on our economy through its impact on credit availability suggests that the effect of a full-fledged financial crisis at home would be enormous—an implication that, sadly, has proven to be correct.

Finally, microeconomic evidence from the recent crisis also shows the importance of the financial system to the real economy. For example, firms that happened to have long-term debt coming due after the crisis began, and thus faced high costs of refinancing, cut their investment much more than firms that did not (Almeida et al. 2009). Another study found that a majority of corporate chief financial officers surveyed reported that their firms faced financing constraints during the crisis, and that the constrained firms on average planned to reduce investment spending, research and development, and employment sharply compared with the unconstrained firms (Campello, Graham, and Harvey 2009).

In short, the goal of the policies to stabilize the financial system was not to help financial institutions. The goal was to help ordinary Americans. When the financial system is not working, individuals and businesses cannot get credit, demand and production plummet, and job losses skyrocket. Thus, an essential step in healing the real economy is to heal the financial system. The alternative of letting financial institutions suffer the consequences of their mistakes would have led to a collapse of credit markets and vastly greater suffering for millions and millions of Americans.

The policies to rescue the financial sector were, however, costly, and often had the side effect of benefiting the very institutions whose irresponsible actions contributed to the crisis. That is one reason that the President has endorsed a Financial Crisis Responsibility Fee on the largest financial firms to repay the Federal Government for its extraordinary actions. As discussed in Chapter 6, the Administration has also proposed a comprehensive plan for financial regulatory reform that will help ensure that Wall Street does not return to the risky practices that were a central cause of the recent crisis.

## THE UNPRECEDENTED POLICY RESPONSE

Given the magnitude of the shocks that hit the economy in the fall of 2008 and the winter of 2009, the downturn could have turned into a second Great Depression. That it has not is a tribute to the aggressive and effective policy response. This response involved the Federal Reserve and other financial regulators, the Administration, and Congress. The policy tools were similarly multifaceted, including monetary policy, financial market interventions, fiscal policy, and policies targeted specifically at housing.

# Monetary Policy

The first line of defense against a weak economy is the interest rate policy of the independent Federal Reserve. By increasing or decreasing the quantity of reserves it supplies to the banking system, the Federal Reserve can lower or raise the Federal funds rate, which is the interest rate at which banks lend to one another. The funds rate influences other interest rates in the economy and so has important effects on economic activity. Using changes in the target level of the funds rate as their main tool of countercyclical policy, monetary policymakers had kept inflation low and the real economy remarkably stable for more than two decades.

The Federal Reserve has used interest rate policy aggressively in the recent episode. The target level of the funds rate at the beginning of 2007 was 51/4 percent. The Federal Reserve cut the target by 1 percentage point over the last four months of 2007 and by an additional 21/4 percentage points over the first four months of 2008. After the events of September, it cut the target in three additional steps in October and December, bringing it to its current level of 0 to 1/4 percent.

Conventional interest rate policy, however, could do little to deal with the enormous disruptions to credit markets. As a result, the Federal Reserve has used a range of unconventional tools to address those disruptions directly. For example, in March 2008, it created the Primary Dealer Credit Facility and the Term Securities Lending Facility to provide liquidity support for primary dealers (that is, financial institutions that trade directly with the Federal Reserve) and the key financial markets in which they operate. In October 2008, when the critical market for commercial paper threatened to stop functioning, the Federal Reserve responded by setting up the Commercial Paper Funding Facility to backstop the market.

Once the Federal Reserve's target for the funds rate was effectively lowered to zero in December 2008, there was another reason to use unconventional tools. Nominal interest rates generally cannot fall below zero: because holding currency guarantees a nominal return of zero, no one is willing to make loans at a negative nominal interest rate. As a result, when the Federal funds rate is zero, supplying more reserves does not drive it lower. Statistical estimates suggest that based on the Federal Reserve's usual response to inflation and unemployment, the subdued level of inflation and the weak state of the economy would have led the central bank to reduce its target for the funds rate by about an additional 5 percentage points if it could have (Rudebusch 2009).

This desire to provide further stimulus, coupled with the inability to use conventional interest rate policy, led the Federal Reserve to undertake large-scale asset purchases to reduce long-term interest rates. In March

2009, the Federal Reserve announced plans to purchase up to \$300 billion of long-term Treasury debt; it also announced plans to increase its purchases of the debt of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks (the government-sponsored enterprises, or GSEs, that support the mortgage market) to up to \$200 billion, and its purchases of agency (that is, Fannie Mae, Freddie Mac, and Ginnie Mae) mortgage-backed securities to up to \$1.25 trillion.

Finally, the Federal Reserve has attempted to manage expectations by providing information about its goals and the likely path of policy. Officials have consistently stressed their commitment to ensuring that inflation neither falls substantially below nor rises substantially above its usual level. In addition, the Federal Reserve has repeatedly stated that economic conditions "are likely to warrant exceptionally low levels of the Federal funds rate for an extended period." To the extent this statement provides market participants with information they did not already have, it is likely to keep longer-term interest rates lower than they otherwise would be.

One effect of the Federal Reserve's unconventional policies has been an enormous expansion of the quantity of assets on the Federal Reserve's balance sheet. Figure 2-4 shows the evolution of Federal Reserve asset holdings since the beginning of 2007. One can see both that asset holdings nearly tripled between January and December 2008 and that there was a dramatic move away from short-term Treasury securities.

Billions of dollars 2,400 Other 2,000 Long-term treasuries and agency debt Short-term treasuries 1,600 1,200 800 400 0 Jan-2007 Jan-2009 Jul-2007 Jan-2008 Jul-2008 Jul-2009

Figure 2-4 Assets on the Federal Reserve's Balance Sheet

Notes: Agency debt refers to obligations of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. Agency mortgage-backed securities are also included in this category. Source: Federal Reserve Board, H.4.1 Table 1.

The flip side of the large increase in the Federal Reserve's asset holdings is a large increase in the quantity of reserves it has supplied to the financial system. Some observers have expressed concern that the large expansion in reserves could lead to inflation. In this regard, two key points should be kept in mind. First, as already described, most statistical models suggest that the Federal Reserve's target interest rate would be substantially lower than it is today if it were not constrained by the fact that the Federal funds rate cannot fall below zero. As a result, monetary policy is in fact unusually tight given the state of the economy, not unusually loose. Second, the Federal Reserve has the tools it needs to prevent the reserves from leading to inflation. It can drain the reserves from the financial system through sales of the assets it has acquired or other actions. Indeed, despite the weak state of the economy, the return of credit market conditions toward normal is leading to the natural unwinding of some of the exceptional credit market programs. Another reliable way the Federal Reserve can keep the reserves from creating inflationary pressure is by using its relatively new ability to raise the interest rate it pays on reserves: banks will be unwilling to lend the reserves at low interest rates if they can obtain a higher return on their balances held at the Federal Reserve.

### Financial Rescue

Efforts to stabilize the financial system have been a central part of the policy response. As just discussed, even before the financial crisis in September 2008, the Federal Reserve was taking steps to ease pressures on credit markets. The events of the fall led to even stronger actions. On September 7, Fannie Mae and Freddie Mac were placed in conservatorship under the Federal Housing Finance Agency to prevent a potentially severe disruption of mortgage lending. On September 16, concern about the potentially catastrophic effects of a disorderly failure of American International Group (AIG) caused the Federal Reserve to extend the firm an \$85 billion line of credit. On September 19, concerns about the possibility of runs on money-market mutual funds led the Treasury to announce a temporary guarantee program for these funds.

On October 3, Congress passed and President Bush signed the Emergency Economic Stabilization Act of 2008. This Act provided up to \$700 billion for the Troubled Asset Relief Program (TARP) for the purchase of distressed assets and for capital injections into financial institutions, although the second \$350 billion required presidential notification to Congress and could be disallowed by a vote of both houses. The initial \$350 billion was used mainly to purchase preferred equity shares in financial institutions, thereby providing the institutions with more capital to help them withstand the crisis.

At President-Elect Obama's request, President Bush notified Congress on January 12, 2009 of his plan to release the second \$350 billion of TARP funds. With strong support from the incoming Administration, the Senate defeated a resolution disapproving the release. These funds provided policymakers with critical resources needed to ensure financial stability.

On February 10, 2009, Secretary of the Treasury Timothy Geithner announced the Administration's Financial Stability Plan. The plan represented a new, comprehensive approach to the financial rescue that sought to tackle the interlocking sources of instability and increase credit flows. An overarching theme was a focus on transparency and accountability to rebuild confidence in financial markets and protect taxpayer resources.

A key element of the plan was the Supervisory Capital Assessment Program (or "stress test"). The purpose was to assess the capital needs of the country's 19 largest financial institutions should economic and financial conditions deteriorate further. Institutions that were found to need an additional capital buffer would be encouraged to raise private capital and would be provided with temporary government capital if those efforts did not succeed. This program was intended not just to examine the capital positions of the institutions and ensure that they obtained more capital if needed, but also to strengthen private investors' confidence in the soundness of the institutions' balance sheets, and so strengthen the institutions' ability to obtain private capital.

Another element of the plan was the Consumer and Business Lending Initiative, which was aimed at maintaining the flow of credit. In November 2008, the Federal Reserve had created the Term Asset-Backed Securities Loan Facility to help counteract the dramatic decline in securitized lending. In the February announcement of the Financial Stability Plan, the Treasury greatly expanded the resources of the not-yet-implemented facility. The Treasury increased its commitment to \$100 billion to leverage up to \$1 trillion of lending for businesses and households. By facilitating securitization, the program was designed to help unfreeze credit and lower interest rates for auto loans, credit card loans, student loans, and small business loans guaranteed by the Small Business Administration (SBA).

A third element of the plan was a Treasury partnership with the Federal Deposit Insurance Corporation and the Federal Reserve to create the Public-Private Investment Program. A central purpose was to remove troubled assets from the balance sheets of financial institutions, thereby reducing uncertainty about their financial strength and increasing their ability to raise capital and hence their willingness to lend. Partnership with the private sector served two important objectives: it leveraged scarce public funds, and it used private competition and incentives to ensure that the government did not overpay for assets.

There were two other key components of the Financial Stability Plan. One was a wide-ranging program to reduce mortgage interest rates and help responsible homeowners stay in their homes. These policies are described later in the section on housing policy. The other component was a range of measures to help small businesses. Many of these were included in the American Recovery and Reinvestment Act and are discussed in the section on fiscal stimulus.

Failure of the two troubled domestic automakers (GM and Chrysler) threatened economy-wide repercussions that would have been magnified by related problems at the automakers' associated financial institutions (GMAC and Chrysler Financial). To avoid these consequences, the Bush Administration set up the Auto Industry Financing Program within the TARP. This program extended \$17.4 billion in funding to the two companies in late December 2008 and early January 2009. The program also extended \$7.5 billion in funding to the two auto finance companies around the same time. Upon taking office, the Obama Administration required the automakers to submit plans for restructuring and a return to viability before additional funds were committed. To sustain the industry during this planning process, the Treasury established the Warranty Commitment Program to reassure consumers that warranties of the troubled firms would be honored. It also initiated the Auto Supplier Support Program to maintain stability in the auto supply base.

Over the spring of 2009, the Administration's Auto Task Force worked with GM and Chrysler to produce plans for viability. In the case of Chrysler, the task force determined that viability could be achieved by merging with the Italian automaker Fiat. For GM, the task force determined that substantial reductions in costs were necessary and charged the company with producing a more aggressive restructuring plan. For both companies, a quick, targeted bankruptcy was judged to be the most efficient and successful way to restructure. Chrysler filed for bankruptcy on April 30, 2009; GM, on June 1. In addition to concessions by all stakeholders, including workers, retirees, creditors, and suppliers, the U.S. Government invested substantial funds to bring about the orderly restructuring. In all, more than \$80 billion of TARP funds had been authorized for the motor vehicle industry as of September 20, 2009.

## Fiscal Stimulus

The signature element of the Administration's policy response to the crisis was the American Recovery and Reinvestment Act of 2009 (ARRA). The President signed the Recovery Act in Denver on February 17, just 28 days after taking office. At an estimated cost of \$787 billion, the Act is the largest countercyclical fiscal action in American history. It provides tax cuts and increases in government spending equivalent to roughly 2 percent of GDP in 2009 and 2¼ percent of GDP in 2010. To put those figures in perspective, the largest expansionary swing in the budget during Franklin Roosevelt's New Deal was an increase in the deficit of about 1½ percent of GDP in fiscal 1936. That expansion, however, was counteracted the very next fiscal year by a contraction that was even larger.

The fiscal stimulus was designed to fill part of the shortfall in aggregate demand caused by the collapse of private demand and the Federal Reserve's inability to lower short-term interest rates further. It was part of a comprehensive package that included stabilizing the financial system, helping responsible homeowners avoid foreclosure, and aiding small businesses through tax relief and increased lending. The President set as a goal for the fiscal stimulus that it raise employment by  $3\frac{1}{2}$  million relative to what it otherwise would have been.

Several principles guided the design of the stimulus. One was that it be spread over two years, reflecting the Administration's view that the economy would need substantial support for more than one year. At the same time, the Administration also strongly supported keeping the stimulus explicitly temporary. It was not to be an excuse to permanently expand the size of government.

A second key principle was that the stimulus be well diversified. Different types of stimulus affect the economy in different ways. Individual tax cuts, for example, affect production and employment in a wide range of industries by encouraging households to spend more on consumer goods, while government investments in infrastructure directly increase construction activity and employment. In addition, underlying economic conditions affect the efficacy of fiscal policy in ways that can be quantitatively important and sometimes difficult to forecast. Likewise, different types of stimulus affect the economy with different speeds. For instance, aid to individuals directly affected by the recession tends to be spent relatively quickly, while new investment projects require more time. Because of the need to provide broad support to the economy over an extended period, the Administration supported a stimulus plan that included a broad range of fiscal actions.

A third principle was that emergency spending should aim to address long-term needs. Some spending, such as unemployment insurance, is aimed at helping those directly affected by the recession maintain a decent standard of living. But government investment spending should aim to create enduring capital investments that increase productivity and growth.

The Recovery Act reflected those guiding principles. The Congressional Budget Office (CBO) estimated that almost one-quarter of the stimulus

would be spent by the end of the third quarter of 2009, and an additional half would be spent over the next four quarters (Congressional Budget Office 2009b). So far, the pace of the spending and tax cuts has largely matched CBO's estimates.

The final package was very well diversified. Roughly one-third took the form of tax cuts. The most significant of these was the Making Work Pay tax credit, which cut taxes for 95 percent of working families. Taxes for a typical family were reduced by \$800 per couple for each of 2009 and 2010. Another provision of the bill provided roughly \$14 billion for one-time payments of \$250 to seniors, veterans, and people with disabilities. The macroeconomic effects of these payments are likely to be similar to those of tax cuts.

Businesses received important tax cuts as well. The most important of these was an extension of bonus depreciation, which reduced taxes on new investments by allowing firms to immediately deduct half the cost of property and equipment purchases. One advantage of such temporary investment incentives is that they can affect the timing of investment, moving some investment from future years when the economy does not have a deficiency of aggregate demand to the present, when it does.

In addition, because the financial market disruptions had a particularly paralyzing effect on the financial plans of small businesses, the Act included additional measures targeted specifically at those businesses. Tax cuts for small businesses included an expansion of provisions allowing for the carryback of net operating losses, a temporary 75 percent exclusion from capital gains taxes on small business stock, and the ability to immediately expense up to \$250,000 of qualified investment purchases. In addition to reducing taxes, these provisions improve cash flow at firms facing credit constraints and provide extra incentives for individuals to invest in small businesses. The Act also included measures to help increase small business lending through the SBA. In particular, it raised to 90 percent the maximum guarantee on SBA general purpose and working capital loans (the 7(a) program) and eliminated fees on both 7(a) loans and loans for fixed-asset capital and real estate investment projects (the 504 program).

Another important part of the stimulus consisted of fiscal relief to state governments. Because almost every state has a balanced-budget requirement, the declines in revenues caused by the recession forced states to cut spending or raise taxes, thereby further contracting demand and magnifying the downturn. Federal fiscal relief can help prevent these contractionary responses, helping to maintain critical state services and state employment, prevent tax increases on families already suffering from the recession, and

cushion the fall in demand. And because many states were already raising taxes and cutting spending when the ARRA was passed, the effects were likely to occur relatively quickly. The Act therefore included roughly \$140 billion of state fiscal relief.

The Recovery Act also included approximately \$90 billion of support for individuals directly affected by the recession. This support serves two critical purposes. First, it provides relief from the recession's devastating impact on families and individuals. Second, because the recipients typically spend this support quickly, it provides an immediate boost to the broader economy. Among the major components of this relief were an extension and expansion of unemployment insurance benefits, subsidies to help the unemployed continue to obtain health insurance, and additional funding for the Supplemental Nutritional Assistance Program. The Act also reduced taxes on unemployment insurance benefits, the effect of which is similar to an expansion of benefits.

Finally, the Recovery Act included direct government investment spending. Because government investment raises output in the short run both through its direct effects and by increasing the incomes and spending of the workers employed on the projects, its output effects are particularly large. In addition, because this type of stimulus is spent less quickly than other types, it will play a vital role in providing support to the economy after 2009. And by funding critical investments, this spending will raise the economy's output even in the long run.

The Act included funding both for traditional government investment projects, such as transportation infrastructure and basic scientific research, and for initial investments to jump-start private investment in emerging new areas, such as health information technology, a smart electrical grid, and clean energy technologies. The Act also included tax credits for specific types of private spending, such as home weatherization and advanced energy manufacturing, which are likely to have effects similar to direct government investment spending. Altogether, roughly one-third of the budget impact of the Recovery Act will take the form of these investments and tax credits.

Fiscal stimulus actions did not end with the passage and implementation of the Recovery Act. In June 2009, the Administration worked with Congress to set up the Car Allowance Rebate System (CARS). Commonly known as the "Cash for Clunkers" program, CARS gave rebates of up to \$4,500 to consumers who replaced older cars and trucks with newer, more fuel-efficient models. The program was in effect for July and most of August. After the program's popularity led to quick exhaustion of the original funding of \$1 billion, the funding was increased to \$3 billion to allow more consumers to participate.

In November, the Worker, Homeownership, and Business Assistance Act of 2009 cut taxes for struggling businesses and strengthened the safety net for workers. In particular, the Act extended the net operating loss provisions of the Recovery Act that allowed small businesses to count their losses this year against taxes paid in previous years for an additional year, and expanded the benefit to medium and large businesses. The Act also provided up to 20 additional weeks of unemployment insurance benefits for workers who were reaching the end of their emergency unemployment benefits. December, an amendment to the Department of Defense Appropriations Act of 2010 continued through the end of February 2010 the unemployment insurance provisions of the Recovery Act, the November extension of emergency benefits, and the COBRA subsidy program that helps unemployed workers maintain their health insurance. It also expanded the COBRA premium subsidy period from 9 to 15 months and extended the increased guarantees and fee waivers for SBA loans.

# **Housing Policy**

The economic and financial crisis began in the housing market, and an important part of the policy response has been directed at that market. The Administration initiated the Making Home Affordable program (MHA) in March 2009. This program was designed to support low mortgage rates, keep millions of homeowners in their homes, and stabilize the housing market.

As described earlier, the Federal Reserve undertook large-scale purchases of GSE debt and mortgage-backed securities in an effort to reduce mortgage interest rates. At the same time, the Treasury Department made an increased funding commitment to the GSEs. This increased government support for the agencies also reduced their borrowing costs and so helped lower mortgage interest rates.

Importantly, MHA also included a program to help households take advantage of lower interest rates. The Home Affordable Refinance Program helps families whose homes have lost value and whose mortgage payments can be reduced by refinancing at historically low interest rates. This program expanded the opportunity to refinance to borrowers with loans owned or guaranteed by the GSEs who had a mortgage balance up to 125 percent of their home's current value.

Another key component of MHA is the Home Affordable Modification Program (HAMP), which is providing up to \$75 billion to encourage loan modifications. It offers incentives to investors, lenders, servicers, and homeowners to encourage mortgage modifications in which all stakeholders share in the cost of ensuring that responsible homeowners can afford their

monthly mortgage payments. To protect taxpayers, HAMP focuses on sound modifications. No payments are made by the government unless the modification lasts for at least three months, and all the payments are designed around the principle of "pay for success." All parties have aligned incentives under the program to achieve successful modifications at an affordable and sustainable level.

The Administration has supported additional programs to help the housing sector. The Recovery Act included an \$8,000 first-time homebuyer's credit for home purchases made before December 1, 2009. As with temporary investment incentives, this credit can help the economy by changing the timing of decisions, bringing buyers into the housing market who were not planning on becoming homeowners until after 2009 or were postponing their purchases in light of the distress in the market. In November, this credit was expanded and extended by the Workers, Homeownership, and Business Assistance Act of 2009.

The Recovery Act also gave considerable resources to the Neighborhood Stabilization Program, a program administered by the Department of Housing and Urban Development to stabilize communities that have suffered from foreclosures and abandoned homes. The Administration also provided assistance to state and local housing finance agencies and their efforts to aid distressed homeowners, stimulate first-time home buying, and provide affordable rental homes. These agencies had faced a significant liquidity crisis resulting from disruptions in financial markets.

## THE EFFECTS OF THE POLICIES

The condition of the American economy has changed dramatically in the past year. At the beginning of 2009, financial markets were functioning poorly, house prices were plummeting, and output and employment were in freefall. Today, financial markets have stabilized and credit is starting to flow again, house prices have leveled off, output is growing, and the employment situation is stabilizing. Because of the depth of the economy's fall, we are a long way from full recovery, and significant challenges remain. But the trajectory of the economy is vastly improved.

There is strong evidence that the policy response has been central to this turnaround. The actions to stabilize credit markets have prevented further destructive failures of major financial institutions and helped maintain lending in key areas. The housing and mortgage policies have kept hundreds of thousands of homeowners in their homes and brought mortgage rates to historic lows. The speed of the economy's change in direction has been remarkable and matches up well with the timing of the fiscal stimulus. And both direct estimates as well as the assessments of expert observers underscore the crucial role played by the stimulus.

#### The Financial Sector

Given the powerful impact of the financial sector on the real economy, a necessary first step to recovery of the real economy was recovery of the financial sector. And the financial sector has unquestionably begun to recover. Figure 2-5 extends the graph of the TED spread and the BAA-AAA spread shown in Figure 2-3 through December 2009. After spiking to unprecedented levels in October 2008, the TED spread fell rapidly over the next two months but remained substantially elevated at the beginning of 2009. It then declined gradually through August and is now at normal levels. This key indicator of the basic functioning of credit markets suggests substantial financial recovery. The BAA-AAA spread remained very high through April but then fell rapidly from April to September. This spread, which normally rises when the economy is weak because of higher corporate default risks, is now at levels comparable to those at the beginning of the recession and below its levels in much of 1990-91 and 2002-03. Thus, the current level of the spread appears to reflect mainly the weak state of the economy rather than any specific difficulties in credit markets.

Percentage points 4 3 2 BAA-AAA 1 Dec-2005 Nov-2006 Nov-2007 Nov-2008 Nov-2009

Figure 2-5 TED Spread and Moody's BAA-AAA Spread Through December 2009

Notes: The TED spread is defined as the three-month London Interbank Offer Rate (LIBOR) less the yield on the three-month U.S. Treasury security. Moody's BAA-AAA spread is the difference between Moody's indexes of yields on AAA and BAA rated corporate bonds.

Source: Bloomberg.

Another broad indicator of the health of the financial system is the level of stock prices, which depend both on investors' expectations of future earnings and on their willingness to bear risk. Figure 2-6 shows the behavior of the S&P 500 stock price index since January 2006. This series declined by 18 percent from its peak in October 2007 through the end of August 2008, fell precipitously in September, and continued to fall through March 2009 as the economy deteriorated sharply and investors became extremely fearful. The stabilization of the economy and the restoration of more normal workings of financial markets have led to a sharp turnaround in stock prices. As of December 31, 2009, the S&P 500 was 65 percent above its low in March. As with the BAA-AAA spread, the current level of stock prices relative to their pre-recession level appears to reflect the weaker situation of the real economy rather than any specific problems with financial markets or investors' willingness to bear risk.

Index (1941-43=10) 1,600 1.500 1.400 1,300 1,200 1,100 1.000 900 800 700 600 Jan-2006 Jan-2009 Jan-2010 Jan-2007 Jan-2008

Figure 2-6 S&P 500 Stock Price Index

Source: Bloomberg.

These indicators show that financial markets have evolved toward normalcy, which was a necessary step in stopping the economic freefall. But for the economy to recover fully, that is not enough: credit must be available to sound borrowers. On this front, the results are more mixed. Some sources of credit are coming back strongly, but others remain weak.

As described in more detail later, one critical market where policies have succeeded in lowering interest rates and maintaining credit flows is the mortgage market. Another market that has recovered substantially is the market for commercial paper. In late 2008 and early 2009, this market was functioning in large part because of the direct intervention of the Federal Reserve. By mid-January, the Federal Reserve's Commercial Paper Funding Facility (CPFF) was holding \$350 billion of commercial paper. As credit conditions have stabilized, however, firms have been able to place their commercial paper privately on better terms than through the CPFF, and levels of commercial paper outstanding have remained stable even as the Federal Reserve has reduced its holdings to less than \$15 billion. Nonetheless, quantities of commercial paper outstanding remain well below their pre-crisis levels.

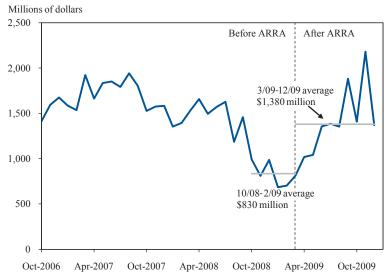
Another crucial source of credit that has stabilized is the market for corporate bonds. As risk spreads have fallen, corporations have found it easier to obtain funding by issuing longer-term bonds than by issuing such instruments as commercial paper. As a result, corporate bond issuance, which fell sharply in the second half of 2008, is now running above pre-crisis levels.

An important financial market development occurred in response to the stress test conducted in the spring. This comprehensive review of the soundness of the Nation's 19 largest financial institutions, together with the public release of this information, strengthened private investors' confidence in the institutions. Partly as a result, the institutions were able to raise \$55 billion in private common equity, improving their capital positions and their ability to lend.

The fact that financial institutions are increasingly able to raise private capital is reducing their need to rely on public capital. Only \$7 billion of TARP funds have been extended to banks since January 20, 2009. Many financial institutions have repaid their TARP funds, and the expected cost of the program to the government has been revised down by approximately \$200 billion since August 2009.

Policy initiatives have also had a clear impact on small business lending. Figure 2-7 shows the amount of SBA-guaranteed loans that have been made since October 2006. SBA loan volume experienced its first significant decrease in September and October 2007; following the failure of Lehman Brothers in September 2008, it fell by more than half. The recovery in small business lending coincided with the passage of the Recovery Act in February 2009. In the months between Lehman's fall and passage of the Recovery Act, average monthly loan volume was \$830 million; immediately after passage, loan volume began to steadily recover and averaged \$1.3 billion per month through September 2009. In September, loan volume reached \$1.9 billion, which was the highest level since August 2007; this has since been exceeded by November 2009's monthly loan volume of

Figure 2-7 Monthly Gross SBA 7(a) and 504 Loan Approvals



Source: Unpublished monthly data provided by the Small Business Administration.

\$2.2 billion. In total, between February and December 2009 the SBA guaranteed nearly \$15 billion in small business lending.

Nonetheless, overall credit conditions have not returned to normal. Many small business owners report continued difficulties in obtaining credit. In addition, the severity of the downturn is leading to elevated rates of failure of small banks, potentially disrupting their lending to small businesses and households. The market for asset-backed securities is also far from fully recovered. As a result, it is often hard for banks and other lenders to package and sell their loans, which forces them to hold a greater fraction of the loans they originate and thus limits their ability to lend.

One important source of data on credit availability is the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices. The survey, conducted every three months, examines whether banks are tightening lending standards, loosening them, or keeping them basically unchanged. The October 2008 survey found that the overwhelming majority of banks were tightening standards. This fraction has declined steadily, and by October 2009 less than 20 percent were reporting that they were tightening standards for commercial and industrial loans, though none reported loosening standards. Thus, credit conditions remain tight.

# Housing

As described earlier, policymakers have taken unprecedented actions to maintain mortgage lending. One result has been a major shift in the

composition of mortgage finance. In 2006, private institutions provided 60 percent of liquidity while the GSEs, the Federal Housing Agency (FHA), and the Veterans Administration (VA) provided the remaining 40 percent. As home prices began to decline nationally in 2007, private financing for mortgages began to dry up. As of November 2009, the mortgages guaranteed by the GSEs, FHA, and the VA accounted for nearly all mortgage originations. About 22 percent of mortgage originations are guaranteed by FHA or VA, up from less than 3 percent in 2006. About 75 percent of mortgage originations are guaranteed by the GSEs, up from less than 40 percent in 2006.

As Figure 2-8 shows, mortgage rates fell to historic lows in 2009 consistent with the government's increased funding commitment to Fannie Mae and Freddie Mac and the Federal Reserve's purchases of mortgagebacked securities. These low mortgage rates support home prices and thus benefit all homeowners. More directly, households that have refinanced their mortgages at the lower rates have obtained considerable savings. These savings have effects similar to tax cuts, improving households' financial positions and encouraging spending on other goods. With the help of the Home Affordable Refinance Program, approximately 3 million borrowers have refinanced, putting more than \$6 billion of purchasing power at an annual rate into the hands of households.

Percent 20 18 16 14 12 10 8 6 4 2 Apr-1971 Apr-1977 Mar-1989 Mar-1995 Mar-2001 Mar-2007 Apr-1983

Figure 2-8 30-Year Fixed Rate Mortgage Rate

Note: Contract interest rate for first mortgages.

Source: Freddie Mac, Primary Mortgage Market Survey.

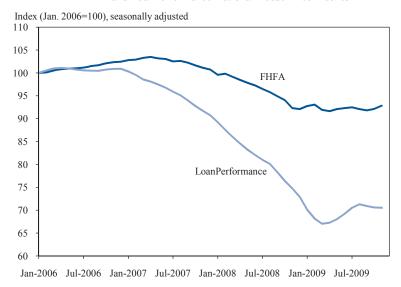
In addition, the Home Affordable Modification Program has been successful in encouraging mortgage modifications. When the program was launched, the Administration estimated that it could offer help to as many as 3 million to 4 million borrowers through the end of 2012. On October 8, 2009, the Administration announced that servicers had begun more than 500,000 trial modifications, nearly a month ahead of the original goal. As of November, the monthly pace of trial modifications exceeded the monthly pace of completed foreclosures. Of course, not all trial modifications will become permanent, but the Administration is making every effort to ensure that as many sound modifications as possible do.

One important result of the policies aimed at the housing market and of the broader policies to support the economy is that the housing market appears to have stabilized. National home price indexes have been relatively steady for the past several months, as shown in Figure 2-9. The Federal Housing Finance Agency purchase-only house price index, which is constructed using only conforming mortgages (that is, mortgages eligible for purchase by the GSEs), has changed little since late 2008. The LoanPerformance house price index, another closely watched measure that uses conforming and nonconforming mortgages with coverage of repeat sales transactions for more than 85 percent of the population, rose 6 percent between March and August 2009 before declining slightly in recent months. In addition, the pace of sales of existing single-family homes has increased substantially. Sales in the fourth quarter of 2009 were 29 percent above their low in the first quarter of 2009 and comparable to levels in the first half of 2007.

Finally, there are signs of renewed building activity. After falling 81 percent from their peak in September 2005 to their low in January 2009, single-family housing permits (a leading indicator of housing construction) rose 49 percent through December 2009. Similarly, after falling for 14 consecutive quarters, the residential investment component of real GDP rose in the third and fourth quarters of 2009.

Inventories of vacant homes for sale remain at high levels, and many vacant homes are being held off the market and will likely be put up for sale as home prices increase. This overhang may lead to some additional price declines, although prices are unlikely to fall at the same rate as they did during the crisis. Thus, the recovery of the housing sector is likely to be slow. Of course, we should neither expect nor want the housing market to return to its pre-crisis condition. In the long run, as discussed in more detail in Chapter 4, neither the extraordinarily high levels of housing construction and price appreciation before the crisis nor the extraordinarily low levels of construction and the rapid price declines during the crisis are sustainable.

Figure 2-9 FHFA and LoanPerformance National House Price Indexes



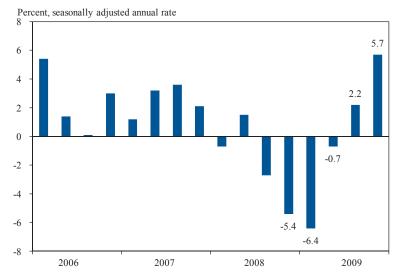
Sources: Federal Housing Finance Agency, purchase-only index; First American Core Logic LoanPerformance.

## Overall Economic Activity

The direction of overall economic activity changed dramatically over the course of 2009. Figure 2-10 shows the quarterly growth rate of real GDP, the broadest indicator of national production. After falling at an annual rate of 6.4 percent in the first quarter, real GDP declined at a rate of just 0.7 percent in the second quarter. It then grew at a 2.2 percent rate in the third quarter and a 5.7 percent rate in the fourth. Such a rapid turnaround in growth is remarkable. The improvement in growth of 8.6 percentage points from the first quarter to the third quarter (that is, the swing from growth at a -6.4 percent rate to growth at a 2.2 percent rate) was the largest since 1983. Similarly, the three-quarter improvement from the first quarter to the fourth of 12.1 percentage points was the largest since 1981, and the second largest since 1958.

One limitation of these simple statistics is that they do not account for the usual dynamics of the economy. A more sophisticated way to gauge the extent of the change in the economy's direction is to compare the path the economy has followed with the predictions of a statistical model. There are many ways to construct a baseline statistical forecast. The particular one used here is a vector autoregression (or VAR) that includes the logarithms of real GDP (in billions of chained 2005 dollars) and payroll employment (in thousands, in the final month of the quarter), using four lags of each variable

Figure 2-10 Real GDP Growth



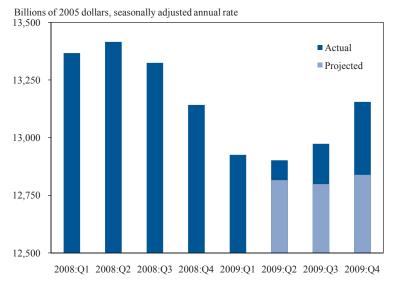
Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.1, line 1.

and estimated over the period 1990:Q1–2007:Q4. Because the sample period ends in the fourth quarter of 2007, the coefficient estimates used to construct the forecast are not influenced by the current recession. Rather, they show the normal joint short-run dynamics of real GDP and employment over an extended period. GDP and employment are then forecast for the final three quarters of 2009 using the estimated VAR and actual data through the first quarter of the year. The resulting comparison of the actual and projected paths of the economy shows the differences between the economy's actual performance and what one would have expected given the situation as of the first quarter and the economy's usual dynamics.¹ Although the results presented here are based on one specific approach to constructing the baseline projection, other reasonable approaches have similar implications.

This more sophisticated exercise also finds that the economy's turnaround has been impressive. The statistical forecast based on the economy's normal dynamics projects growth at a -3.3 percent rate in the second quarter of 2009, -0.5 percent in the third, and 1.3 percent in the fourth. In all three quarters, actual growth was substantially higher than the projection. Figure 2-11 shows that as a result, the *level* of GDP exceeded the projected level by an increasing margin: 0.7 percent in the second quarter, 1.4 percent in the third quarter, and 2.5 percent in the fourth.

<sup>&</sup>lt;sup>1</sup> For more details on this approach and the model-based approach discussed later, see Council of Economic Advisers (2010).

Figure 2-11 Real GDP: Actual and Statistical Baseline Projection



Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.6, line 1; CEA calculations. See Council of Economic Advisers (2010).

The gap between the actual and projected paths of GDP provides a rough way to estimate the effect of economic policy. The most obvious sources of the differences are the unprecedented policy actions. However, the gap reflects all unusual influences on GDP. For example, the rescue actions taken in other countries (described in Chapter 3) could have played a role in better American performance. At the same time, the continuing stringency in credit markets is likely lowering output relative to its usual cyclical patterns. Thus, while some factors work in the direction of causing the comparison of the economy's actual performance with its normal behavior to overstate the contribution of economic policy actions, others work in the opposite direction.

One way to estimate the specific impact of the Recovery Act is to use estimates from economic models. Mainstream estimates of economic multipliers for the effects of fiscal policy can be combined with figures on the stimulus to date to estimate how much the stimulus has contributed to growth. (For the financial and housing policies, this approach is not feasible, because the policies are so unprecedented that no estimates of their effects are readily available.) When this exercise is performed using the multipliers employed by the Council of Economic Advisers (CEA), which are based on mainstream economic models, the results suggest a critical role for the fiscal stimulus. They suggest that the Recovery Act contributed approximately 2.8 percentage points to *growth* in the second quarter, 3.9 percentage points in the third, and 1.8 percentage points in the fourth. As a result, this approach suggests that the *level* of GDP in the fourth quarter was slightly more than 2 percent higher than it would have been in the absence of the stimulus.

Knowledgeable outside observers agree that the Recovery Act has increased output substantially relative to what it otherwise would have been. For example, in November 2009, CBO estimated that the Act had raised the level of output in the third quarter by between 1.2 and 3.2 percent relative to the no-stimulus baseline (Congressional Budget Office 2009a). Private forecasters also generally estimate that the Act has raised output substantially.

A final way to look for the effects of the rescue policies on GDP is in the behavior of the components of GDP. Figure 2-12 shows the contribution of various components of GDP to overall GDP growth in each of the four quarters of 2009. One area where policy's role seems clear is in business investment in equipment and software. A key source of the turnaround in GDP is the change in this type of investment from a devastating 36 percent annual rate of decline in the first quarter to a 13 percent rate of increase by the fourth quarter. Two likely contributors to this change were the investment incentives in the Recovery Act and the many measures to stabilize the financial system and maintain lending. Similarly, the housing and financial

Percentage points 5 PCE Nonres. Equip. I Res. Inventory Fed. S&L Net Fixed I Gov't Struct. Gov't Exports 4 3 2 1 0 ■2009:Q1 -1 ■2009:Q2 -2 ■2009:Q3 -3 ■2009:O4 -4

Figure 2-12 Contributions to Real GDP Growth

Notes: Bars sum to quarterly change in GDP growth (-6.4% in Q1; -0.7% in Q2; 2.2% in Q3; 5.7% in Q4). PCE is personal consumption expenditures; Nonres. Struct. is nonresidential fixed investment in structures; Equip I. is nonresidential fixed investment in equipment and software; Res. Fixed I is residential fixed investment; Inventory I is inventory investment; Federal Gov't is Federal Government purchases; S&L Gov't is state and local government purchases; Net Exports is net exports.

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.2.

market policies were surely important to the swing in the growth of residential investment from a 38 percent annual rate of decline in the first quarter to increases in the third and fourth quarters.

Two other components showing evidence of the policies' effects are personal consumption expenditures and state and local government purchases. The Making Work Pay tax credit and the aid to individuals directly affected by the recession meant that households did not have to cut their consumption spending as much as they otherwise would have, and the Cash for Clunkers program provided important incentives for motor vehicle purchases in the third quarter. Consumption was little changed in the first two quarters of 2009 and then rose at a healthy 2.8 percent annual rate in the third quarter—driven in considerable part by a 44 percent rate of increase in purchases of motor vehicles and parts—and at a 2.0 percent rate in the fourth quarter. And, despite the dire budgetary situations of state and local governments, their purchases rose at the fastest pace in more than five years in the second quarter and were basically stable in the third and fourth quarters. This stability almost surely could not have occurred in the absence of the fiscal relief to the states.

The figure also shows the large role of inventory investment in magnifying macroeconomic fluctuations. When the economy goes into a recession, firms want to cut their inventories. As a result, inventory investment moves from its usual slightly positive level to sharply negative, contributing to the fall in output. Then, as firms moderate their inventory reductions, inventory investment rises—that is, becomes less negative contributing to the recovery of output.

Finally, the turnaround in the automobile industry has been substantial. The Cash for Clunkers program appears to have generated a sharp increase in demand for automobiles in July and August 2009 (Council of Economic Advisers 2009). Sales of light motor vehicles averaged 12.6 million units at an annual rate during these two months, up from an annual rate of 9.6 million units in the second quarter. Although some observers had hypothesized that the July and August sales boost would be offset by a corresponding loss of sales in the months immediately following, sales in September (9.2 million at an annual rate) roughly matched the pace of sales in the first half of 2009, and sales subsequently rebounded to a 10.8 million unit annual pace in the fourth quarter. Employment in motor vehicles and parts hit a low of 633,300 in June 2009 and has increased modestly since then. In December 2009, employment was 655,200.

Both GM and Chrysler proceeded through bankruptcy in an efficient manner, and the new companies emerged far more quickly than outside experts thought would be possible. The companies are performing in line

with their restructuring plans, and in November 2009, GM announced its intention to begin repaying the Federal Government earlier than originally expected. It made a first payment of \$1 billion in December.

#### The Labor Market

The ultimate goal of the economic stabilization and recovery policies is to provide a job for every American who seeks one. The recession's impact on the labor market has been severe: employment in December 2009 was 7.2 million below its peak level two years earlier, and the unemployment rate was 10 percent. Moreover, although real GDP has begun to grow, employment losses are continuing.

Nonetheless, there is clear evidence that the labor market is stabilizing. Figure 2-13 shows the average monthly job loss by quarter since 2006. Average monthly job losses have moderated steadily, from a devastating 691,000 in the first quarter of 2009 to 428,000 in the second quarter, 199,000 in the third, and 69,000 in the fourth. The *change* in the average monthly change in employment from the first quarter to the third was the largest over any two-quarter period since 1980, and the change from the first to the fourth quarter was the largest three-quarter change since 1946. Given what we now know about the terrible rate of job loss over the winter, it would have been very difficult for the labor market to stabilize more rapidly than it has.

Thousands, seasonally adjusted

200

-200

-400

-600

-800

2006

2007

2008

2009

Figure 2-13
Average Monthly Change in Employment

Source: Department of Labor (Bureau of Labor Statistics), Current Employment Statistics survey Series CES0000000001.

One can again use the VAR described earlier to obtain a more refined estimate of how the behavior of employment has differed from its usual pattern. This statistical procedure implies that given the economy's behavior through the first quarter of 2009 and its usual dynamics, one would have expected job losses of about 597,000 per month in the second quarter, 513,000 in the third quarter, and 379,000 in the fourth. Thus, actual employment as of the middle of the second quarter (May) was approximately 300,000 higher than one would have projected given the normal behavior of the economy; as of the middle of the third quarter (August), it was about 1.1 million higher; and as of the middle of the fourth quarter (November), it was about 2.1 million higher. As with the behavior of GDP, the portion of this difference that is attributable to the Recovery Act and other policies cannot be isolated from the portion resulting from other factors. But again, the difference could either understate or overstate the policies' contributions.

As with GDP, economic models can be used to focus specifically on the contributions of the Recovery Act. The results are shown in Figure 2-14. The CEA's multiplier estimates suggest that the Act raised employment relative to what it otherwise would have been by about 400,000 in the second quarter of 2009, 1.1 million in the third quarter, and 1.8 million in the fourth quarter. Again, these estimates are similar to other assessments. For example, CBO's November report estimated that the Act had raised

Thousands 2,100 1.772 1,800 1,500 1,111 1,200 900 600 385 300 0 2009:O2 2009:O3 2009:O4

Figure 2-14 Estimated Effect of the Recovery Act on Employment

Note: The figure shows the estimated impact on employment relative to what otherwise would have happened.

Source: CEA calculations. See Council of Economic Advisers (2010).

employment in the third quarter by between 0.6 million and 1.6 million, relative to what otherwise would have happened.

A more complete picture of the process of labor market healing can be obtained by looking at labor market indicators beyond employment. Table 2-1 shows some of the main margins along which labor market recovery occurs. The margins are listed from left to right in the rough order in which they tend to adjust coming out of a recession. One of the first margins to respond is productivity—when demand begins to recover or moderates relative to the previous rate of decline, firms initially produce more with the same number of workers. Another early margin is initial claims for unemployment insurance—fewer workers are laid off. A somewhat later margin is the average workweek—firms start increasing production by increasing hours. The usual next step is temporary help employment—when firms decide to hire, they often begin with temporary help. Eventually total employment responds. The unemployment rate usually lags employment slightly because employment growth brings some discouraged workers back into the labor force and because the labor force naturally grows over time. The last item to adjust is usually the duration of unemployment spells, as workers who have been unemployed for extended periods finally find jobs.

The table shows that recovery from this recession is following the typical pattern, with labor market repair evident along the margins that typically respond early in a recovery. Productivity growth has surged as GDP has begun to increase and employment has continued to fall.

Table 2-1 Cyclically Sensitive Elements of Labor Market Adjustment

	Produc-	Average monthly change							
	tivity growth, annual rate (percent)	Initial UI claims Work- (thou- week sands/ (hours) week)		Tempo- rary help employ- ment (thou- sands)	Total employ- ment (thou- sands)	Un- employ- ment rate (percent)	Average duration of unem- ployment (weeks)		
2008:Q4	0.8	22	-0.10	-70	-553	0.39	0.3		
2009:Q1	0.3	40	-0.07	-73	-691	0.42	0.4		
2009:Q2	6.9	-15	-0.03	-28	-428	0.29	1.2		
2009:Q3	8.1 <sup>p</sup>	-22	0.03	5	-199	0.11	0.7		
2009:Q4	7.5 <sup>e</sup>	-30	0.03	49	-69	0.04	0.9		

Notes: This table arranges the indicators according to the order in which they typically first move around business cycle turning points. Quarterly values for the average monthly change are measured from the last month in the previous quarter to the last month in the quarter. p is preliminary; e is

Sources: Department of Labor (Bureau of Labor Statistics), Series PRS85006092, and Employment Situation Tables A, A-9, and B-1; Department of Labor (Employment and Training Administration).

Initial unemployment insurance claims, which rose precipitously earlier in the recession, have begun to decline at an increasing rate. Likewise, the workweek has gone from shortening to lengthening, albeit slowly. Temporary help employment has changed from extreme declines to substantial increases. So far, total employment has shown a greatly moderating decline but has not yet risen. The pace of increase in the unemployment rate has slowed noticeably, but the unemployment rate has not yet fallen on a quarterly basis. Finally, increases in the duration of unemployment have not yet begun to moderate noticeably.

These data suggest that the labor market is beginning to move in the right direction, but much work remains to be done. The country is not yet seeing the substantial rises in total employment and declines in the unemployment rate that are the ultimate hallmark of robust labor market improvement. And, of course, even once all the indicators are moving solidly in the right direction, the labor market will still have a long way to go before it is fully recovered.

Signs of healing are also beginning to appear in the industrial composition of the stabilization of the labor market. Figure 2-15 shows the average monthly change in each of eight sectors in each of the four quarters of 2009. As one would expect of the beginnings of a recovery from a severe

Thousands, average monthly change from end of quarter to end of quarter 160 110 Edu. & Federal S&L Other Prof. & Con-Mfg. Trade Bus. Serv. Health Gov't Gov't struct. 60 10 -40 -90 ■2009:O1 -140■2009:Q2 ■2009:Q3 -190 ■2009:Q4 -240

Figure 2-15 Contributions to the Change in Employment

Notes: Bars sum to average monthly change in quarter (-691,000 in Q1; -428,000 in Q2; -199,000 in Q3; -69,000 in Q4). Construct. is construction; Mfg. is manufacturing; Trade is wholesale and retail trade, transportation, and utilities; Prof. & Bus. Serv. is professional and business services; Edu. & Health is education and health; Federal Gov't is Federal Government; S&L Gov't is state and local government.

Source: Department of Labor (Bureau of Labor Statistics), Employment Situation Table B-1.

recession, the moderation in job losses has been particularly pronounced in manufacturing and construction, two of the most cyclically sensitive sectors. There has also been a sharp turnaround in professional business services, driven largely by renewed employment growth in temporary help services.

One area where the Recovery Act appears to have had a direct impact on employment is in state and local government. Despite the enormous harm the recession has done to their budgets, employment in state and local governments has fallen relatively little. Indeed, employment in state and local government, particularly in public education, rose in the fourth quarter.

## THE CHALLENGES AHEAD

The financial and economic rescue policies have helped avert an economic calamity and brought about a sharp change in the economy's direction. Output has begun growing again, and employment appears poised to do so as well. But even when the country has returned to a path of steadily growing output and employment, the economy will be far from fully recovered. Since the recession began in December 2007, 7.2 million jobs have been lost. It will take many months of robust job creation to erase that employment deficit. For this reason, it is important to explore policies to speed recovery and spur job creation.

## **Deteriorating Forecasts**

This jobs deficit is much larger than the vast majority of observers anticipated at the end of 2008. This is not the result of a slow economic turnaround. On the contrary, as described above, the change in the economy's direction has been remarkably rapid given the economy's condition in the first quarter of 2009. Rather, the jobs deficit reflects two developments.

The first development is the unanticipated severity of the downturn in the real economy in 2008 and early 2009. Table 2-2 shows consensus forecasts from November 2008 through February 2009, along with preliminary and actual estimates of real GDP growth. The table shows that the magnitude of the fall in GDP in the fourth quarter of 2008 and the first quarter of 2009—driven in part by the unexpectedly strong spread of the crisis to the rest of the world—surprised most observers. The Blue Chip Consensus released in mid-December 2008 projected fourth quarter growth would be -4.1 percent and first quarter growth would be -2.4 percent. The actual values turned out to be -5.4 percent and -6.4 percent. The Blue Chip forecast released in mid-January also projected a substantially smaller decline in first quarter real GDP than actually occurred.

Table 2-2 Forecast and Actual Macroeconomic Outcomes

Real GDP Growth							
	2008:Q4	2009:Q1	2009:Q2	2009:Q3	2009:Q4		
Blue Chip (11/10/08)	-2.8	-1.5	0.2	1.5	2.1		
SPF (11/17/08)	-2.9	-1.1	0.8	0.9	2.3		
Blue Chip (12/10/08)	-4.1	-2.4	-0.4	1.2	1.9		
Blue Chip (1/10/09)	-5.2	-3.3	-0.8	1.2	2.2		
SPF (2/13/09)		-5.2	-1.8	1.0	1.8		
BEA Advance Estimate	-3.8	-6.1	-1.0	3.5	5.7		
BEA Preliminary (2nd) Estimate	-6.2	-5.7	-1.0	2.8			
Actual	-5.4	-6.4	-0.7	2.2			

#### Unemployment Rate

	2008:Q4	2009:Q1	2009:Q2	2009:Q3	2009:Q4
Blue Chip (11/10/08)	6.5	6.9	7.3	7.6	7.7
SPF (11/17/08)	6.6	7.0	7.4	7.6	7.7
Blue Chip (12/10/08)	6.7	7.3	7.7	8.0	8.1
Blue Chip (1/10/09)	6.9	7.4	7.9	8.3	8.4
SPF (2/13/09)		7.8	8.3	8.7	8.9
Actual	6.9	8.2	9.3	9.7	10.0

Notes: In the GDP panel, all numbers are in percent and are seasonally adjusted annual rates. In the unemployment panel, all numbers are in percent and are seasonally adjusted. SPF is the Survey of Professional Forecasters. Dashes indicate data are not available.

Sources: Blue Chip Economic Indicators; Survey of Professional Forecasters; Department of Commerce (Bureau of Economic Analysis), GDP news releases on 1/30/2009, 2/27/2009, 4/29/2009, 5/29/2009, 7/31/2009, 8/27/2009, 10/29/2009, 11/24/2009, 1/29/2010, and National Income and Product Accounts Table 1.1.1, line 1; Department of Labor (Bureau of Labor Statistics), Current Population Survey Series LNS14000000.

Part of the difficulty in forecasting resulted from large data revisions. The official GDP figures available at the end of January 2009 indicated that real GDP had fallen by just 0.2 percent over the four quarters of 2008; revised data now put the decline at 1.9 percent.

The Administration's economic forecast made in January 2009 and released with the fiscal 2010 budget, like the private forecasts, underestimated the speed of GDP decline in the first quarter. It also underestimated average growth over the remaining three quarters of 2009. For the four quarters of 2009, the Administration forecast overall growth of 0.3 percent; the actual value, according to the latest available data, is 0.1 percent.

The second development accounting for the unexpectedly large jobs deficit involves the behavior of the labor market given the behavior of GDP. Table 2-2 also shows consensus forecasts for the unemployment rate. These data indicate that as of December 2008, unemployment in the fourth quarter of 2009 was forecast to be 8.1 percent, dramatically less than the actual value of 10.0 percent. As of mid-January 2009, unemployment was forecast to be 8.4 percent in the fourth quarter. In its forecast made in

January 2009, the Administration unemployment forecast was similar to the consensus forecast.

Some of the unanticipated rise in unemployment was the result of the worse-than-expected GDP growth in 2008 and the beginning of 2009. CEA analysis, however, also suggests that the normal relationship between GDP and unemployment has fit poorly in the current recession. This relationship, termed Okun's law after former CEA Chair Arthur Okun who first identified it, suggests that a fall in GDP of 1 percent relative to its normal trend path is associated with a rise in the unemployment rate of about 0.5 percentage point after four quarters. Figure 2-16 shows the scatter plot of the four-quarter change in real GDP and the four-quarter change in the unemployment rate. The figure shows that although the fit of Okun's law is usually good, the relationship has broken down somewhat during this recession. The error was concentrated in 2009, when the unemployment rate increased considerably faster than might have been expected given the change in real GDP. CEA calculations suggest that as of the fourth quarter of 2009, the unemployment rate was approximately 1.7 percentage points higher than would have been expected given the behavior of real GDP since the business cycle peak in the fourth quarter of 2007.

This unusual rise in the unemployment rate does not appear to result from unusual behavior of the labor force. If anything, the labor force

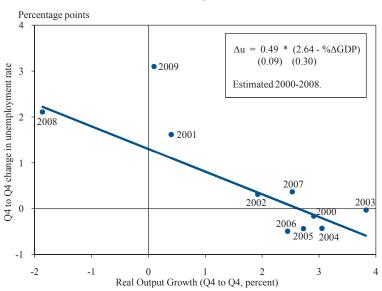


Figure 2-16 Okun's Law, 2000-2009

Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.1, line 1; Department of Labor (Bureau of Labor Statistics), Current Population Survey Series LNS11000000 and LNS113000000; CEA calculations.

appears to have contracted somewhat more than usual given the path of the economy. Rather it reflects larger-than-typical falls in employment relative to the decline in GDP. This behavior is consistent with the tremendous increase in productivity during this episode, especially over the final three quarters of 2009. Indeed, labor productivity rose at a 6.9 percent annual rate in the second quarter and at an 8.1 percent rate in the third quarter; if productivity rose by a similar amount in the fourth quarter, as seems likely, the increase will have been one of the fastest over three quarters in postwar history.

#### The Administration Forecast

Looking forward, the Administration projects steady but moderate GDP growth over the near and medium term. Table 2-3 reports the Administration's forecast used in preparing the President's fiscal year 2011 budget. The table shows that GDP growth in 2010 is forecast to be 3 percent.

Table 2-3 Administration Economic Forecast

	Nominal GDP	Real GDP (chain- type)	GDP price index (chain- type)	Con- sumer price index (CPI-U)	Un- employ- ment rate (percent)	Interest rate, 91-day Treasury bills (percent)	Interest rate, 10-year Treasury notes (percent)	Nonfarm payroll employ- ment (average monthly change, Q4 to Q4, thou- sands)
	Pe	rcent chan	ge, Q4 to	Q4		Level, cale	endar year	
2008 (actual)	0.1	-1.9	1.9	1.5	5.8	1.4	3.7	-189
2009	0.4	-0.5	0.9	1.4	9.3	0.2	3.3	-419
2010	4.0	3.0	1.0	1.3	10.0	0.4	3.9	95
2011	5.7	4.3	1.4	1.7	9.2	1.6	4.5	190
2012	6.1	4.3	1.7	2.0	8.2	3.0	5.0	251
2013	6.0	4.2	1.7	2.0	7.3	4.0	5.3	274
2014	5.7	3.9	1.7	2.0	6.5	4.1	5.3	267
2015	5.2	3.4	1.7	2.0	5.9	4.1	5.3	222
2016	5.0	3.1	1.8	2.1	5.5	4.1	5.3	181
2017	4.5	2.7	1.8	2.1	5.3	4.1	5.3	139
2018	4.5	2.6	1.8	2.1	5.2	4.1	5.3	113
2019	4.4	2.5	1.8	2.1	5.2	4.1	5.3	98
2020	4.3	2.5	1.8	2.1	5.2	4.1	5.3	93

Notes: Based on data available as of November 18, 2009. Interest rate on 91-day Treasury bills is measured on a secondary market discount basis. The figures do not reflect the upcoming BLS benchmark revision, which is expected to reduce 2008 and 2009 job growth by a cumulative

Sources: CEA calculations; Department of Commerce (Bureau of Economic Analysis and Economics and Statistics Administration); Department of Labor (Bureau of Labor Statistics); Department of the Treasury; Office of Management and Budget.

The Administration estimates that normal or potential GDP growth will be roughly 2½ percent per year (see Box 2-1). Because projected GDP growth is only slightly stronger than potential growth, relatively little decline is projected in the unemployment rate during 2010. Indeed, it is possible that the rate will rise for a while as some discouraged workers return to the labor force, before starting to generally decline. Consistent with this, employment growth is projected to be roughly equal to normal trend growth of about 100,000 per month.

#### Box 2-1: Potential Real GDP Growth

The Administration forecast is based on the idea that real GDP fluctuates around a potential level that trends upward at a relatively steady rate. Over the budget window, potential real GDP is projected to grow at a 2.5 percent annual rate. Potential real GDP growth is a measure of the sustainable rate of growth of productive capacity.

The growth rate of the economy over the long run is determined by its supply side components, which include population, labor force participation, the ratio of nonfarm business employment to household employment, the length of the workweek, and labor productivity. The Administration's forecast for the contribution of the growth rates of these supply side factors to potential real GDP growth is shown in the accompanying table.

Components of Potential Real GDP Growth, 2009-2020					
Component	Contribution (Percentage points)				
Civilian noninstitutional population aged 16+	1.0				
Labor force participation rate	-0.3				
Employment rate	0.0				
Ratio of nonfarm business employment to	-0.0				
household employment					
Average weekly hours (nonfarm business)	-0.1				
Output per hour (productivity, nonfarm business)	2.3				
Ratio of real GDP to nonfarm business output	-0.4				
SUM: Real GDP	2.5				

Note: All contributions are in percentage points at an annual rate. Sources: CEA calculations; Department of the Treasury; Office of Management and Budget.

Over the next 11 years, the working-age population is projected to grow 1.0 percent per year, the rate projected by the Census Bureau.

Continued on next page

#### Box 2-1, continued

The normal or potential labor force participation rate, which fell at a 0.3 percent annual rate during the past 8 years, is expected to continue declining at that pace. The continued projected decline results from the aging baby boom generation entering their retirement years. The potential employment rate (that is, 1 minus the normal or potential unemployment rate) is not expected to contribute to potential GDP growth because no change is anticipated in the unemployment rate consistent with stable inflation. The potential ratio of nonfarm business employment to household employment is also expected to be flat during the forecast horizon—consistent with its average behavior in the long run. This would be a change, however, from its puzzling 0.5 percent annual rate of decline during the past business cycle. The potential workweek is projected to edge down slightly (0.1 percent per year). This is a slightly shallower pace of decline than over the past 50 years, when it declined 0.3 percent per year. Over the 11-year projection interval, some firming of the workweek would be a natural labor market accommodation to the anticipated decline in labor force participation.

Potential growth of labor productivity is projected at 2.3 percent per year, a conservative forecast relative to its measured product-side growth rate (2.8 percent) between the past two business cycle peaks, but close to an alternative income-side measure of productivity growth (2.2 percent) during the same period. The ratio of real GDP to nonfarm business output is expected to continue to subtract from overall growth as it has over most long periods, because the nonfarm business sector generally grows faster than other sectors, such as government, households, and nonprofit institutions. Together, the sum of all of the components is the growth rate of potential real GDP, which is 2.5 percent per year.

As Table 2-3 shows, actual real GDP is projected to grow more rapidly than potential real GDP over most of the forecast horizon. The most important reason for the difference is that the actual employment rate is projected to rise as millions of workers who are currently unemployed return to employment and so contribute to GDP growth.

Traditionally, the large amount of slack would be expected to put substantial downward pressure on wage and price inflation. For this reason, inflation is projected to remain low in 2010. However, because inflationary expectations remain well anchored, inflation is not likely to slow dramatically or become negative (that is, turn into deflation).

In 2011, slightly higher GDP growth of approximately 4 percent is projected (again measured from fourth quarter to fourth quarter). Consistent with this, stronger employment growth and a more substantial decline in the unemployment rate are expected in 2011. However, because GDP growth is still not projected to be as robust as that following some other deep recessions, continued large output gaps are anticipated. This will limit the upward movement of the inflation rate toward a pace consistent with the Federal Reserve's long-term target inflation rate of about 2 percent. Moreover, employment growth is unlikely to be large enough to reduce the employment shortfall dramatically in 2011.

## Responsible Policies to Spur Job Creation

This large employment gap and the prospects that it is likely to recede only slowly make a compelling case for additional measures to spur private sector job creation. The Administration is therefore exploring a range of possibilities and working with Congress to pass measures into law.

Several principles are guiding this process. First, at a time when the budget deficit is large and the country faces significant long-run fiscal challenges, measures must be cost-effective. Second, given that the employment consequences of the recession have been severe, measures must focus particularly on job creation. And third, measures must be tailored to the state of the economy: the policies that are appropriate when an economy is contracting rapidly may not be the same as those that are appropriate for an economy that is growing again but operating below capacity.

Guided by these principles, the Administration has identified three key priorities. One is a multifaceted program to jump-start job creation by small businesses, which are critical to growth and have been particularly harmed by the recession. Among the possible policies in this area are investment incentives, tax incentives for hiring, and additional steps to increase the availability of loans backed by the Small Business Administration. These policies may be particularly effective at a time when the economy is growing—so that the question for many firms is not whether to hire but when—and at a time when credit availability remains an important constraint.

Initiatives to encourage energy efficiency and clean energy are another priority. One proposal involves incentives for homeowners to retrofit their homes for energy efficiency. Because in many cases the effect of such incentives would be to lead homeowners to make cost-saving investments earlier than they otherwise would have, they might have an especially large impact. In addition, the employment effects would be concentrated in construction, an area that has been particularly hard-hit by the recession.

The Administration has also supported extending tax credits through the Department of Energy that promote the manufacture of advanced energy products and providing incentives to increase the energy efficiency of public and nonprofit buildings.

A third priority is infrastructure investment. The experience of the Recovery Act suggests that spending on infrastructure is an effective way to put people back to work while creating lasting investments that raise future productivity. For this reason, the Administration is supporting an additional investment of up to \$50 billion in roads, bridges, airports, transit, rail, and water projects. Funneling some of these funds through programs such as the Transportation Investment Generating Economic Recovery (TIGER) program at the Department of Transportation, which is a competitive grant program, could offer a way to ensure that the projects with the highest returns receive top priority.

Finally, it is critical to maintain our support for the individuals and families most affected by the recession by extending the emergency funding for such programs as unemployment insurance and health insurance subsidies for the unemployed. This support not only cushions the worst effects of the downturn, but also boosts spending and so spurs job creation. Similarly, it is important to maintain support for state and local governments. The budgets of these governments remain under severe strain, and many are cutting back in anticipation of fiscal year 2011 deficits. Additional fiscal support could therefore have a rapid impact on spending, and would do so by maintaining crucial services and preventing harmful tax increases.

#### Conclusion

The recession that began at the end of 2007 became the "Great Recession" following the financial crisis in the fall of 2008. In the wake of the collapse of Lehman Brothers in September, American families faced devastating job losses, high unemployment, scarce credit, and lost wealth. Late 2008 and 2009 will be remembered as a time of great trial for American workers, businesses, and families.

But 2009 should also be remembered as a year when even more tragic losses and dislocation did not occur. As terrible as this recession has been, a second Great Depression would have been far worse. Had policymakers not responded as aggressively as they did to shore up the financial system, maintain demand, and provide relief to those directly harmed by the downturn, the outcome could have been much more dire.

As 2010 begins, there are strong signs that the American economy is starting to recover. Housing and financial markets appear to have stabilized and real GDP is growing again. The labor market also appears to be healing, showing the expected early pattern of response to output expansion.

With millions of Americans still unemployed, much work remains to restore the American economy to health. It will take a prolonged and robust GDP expansion to eliminate the large jobs deficit that has opened up over the course of the recession. Only when the unemployment rate has returned to normal levels and families are once again secure in their jobs, homes, and savings will this terrible recession truly be over.



## CHAPTER 3

# CRISIS AND RECOVERY IN THE WORLD ECONOMY

The financial crisis and recession have affected economies around the globe. The impact on the U.S. economy has been severe, but many areas of the world have fared even worse. The average growth rate of real gross domestic product (GDP) around the world was -6.2 percent at an annual rate in the fourth quarter of 2008 and -7.5 percent in the first quarter of 2009. All told, the world economy is expected to have contracted 1.1 percent in 2009 from the year before—the first annual decline in world output in more than half a century.¹ Although economic dislocations have been severe in one region or another at various times over the past 50 years, never in that time span has the annual output of the entire global economy contracted. But, as bad as the outcome has been, the decline would likely have been far larger if policymakers in the world's key economies had not acted forcefully to limit the impact of the crisis.

The global economic crisis started as a financial crisis, generally beginning in housing-related asset markets, and accelerated in the fall of 2008. After September 2008, interbank interest rates spiked, exchange rates shifted quickly, and the flows of capital across borders slowed dramatically. Trade flows also plummeted, falling even more dramatically than GDP. As a result, trade flows became a key transmission mechanism in the crisis, spreading macroeconomic distress to countries that were not primarily exposed to the financial shocks.

Policymakers around the world responded quickly, sometimes taking coordinated action, sometimes acting independently. Many central banks

<sup>&</sup>lt;sup>1</sup> Quarterly figures are calculations of the Council of Economic Advisers based on a 64-country sample that represents 93 percent of world GDP. Annual average projections are from the International Monetary Fund (2009a). These projections indicate that from the fourth quarter of 2007 to the fourth quarter of 2008, world GDP contracted 0.1 percent, and from the fourth quarter of 2008 to the fourth quarter of 2009, world GDP expanded 0.8 percent. The contraction was strongest from the middle of 2008 to the middle of 2009; hence the annual average growth from 2008 to 2009 (-1.1 percent) is lower than the fourth-quarter-to-fourth-quarter numbers.

cut interest rates nearly to zero and expanded their balance sheets to try to stimulate lending and keep their economies going. They also lent large sums to one another to prevent dislocations caused by a lack of foreign currency in some markets. Beyond the central bank actions, governments intervened more broadly in banks and financial markets as well. Governments also spent large sums in fiscal stimulus to avoid massive drop-offs in aggregate demand. In a welcome development, they did not, however, restrict trade in an attempt to turn away imports.

The global economy is now seeing the beginnings of recovery. Financial markets have rebounded, trade is recovering, and GDP growth rates are again positive. Recovery is far from complete or certain, and some risks remain: lending is still constrained, and unemployment is painfully high. But, at the start of 2010, the world economy is no longer at the edge of collapse, and the elements of a sound recovery seem to be coming into place.

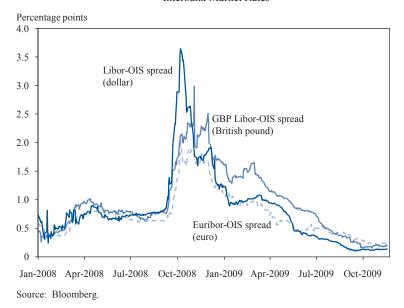
#### International Dimensions of the Crisis

The worldwide contraction had roots in many financial phenomena, and its rapid spread can be seen in a number of financial indicators. Borrowing costs increased, U.S. dollars were scarce in foreign markets, and exchange rates moved rapidly. Yet, despite problems in U.S. financial markets, there was no U.S. dollar crisis, and while currency markets moved rapidly, many of the emerging-market currency depreciations were temporary and not accompanied by cascading defaults. Thus, the world economy was better positioned for recovery than it might have been.

# Spread of the Financial Shock

One of the early indicators of the crisis was the large spike in the interest rate banks charge one another that took place as the value of assets held on bank balance sheets came into question. After the investment bank Lehman Brothers declared bankruptcy in September 2008, banks grew even warier about lending to each other. This fear of lending to one another can be seen by comparing the interbank lending rate with the risk-free overnight interest rate. Similar to the TED spread, the Libor-OIS spread (the London interbank offered rate minus the overnight indexed swap) gives such a comparison for dollar loans, and comparable spreads are available for loans in other currencies. As Figure 3-1 shows, the spike in spreads for dollar loans was larger earlier, but the increase in interbank lending rates was sharp in dollars, pounds, and euros alike. Banks simply refused to lend to one another at low rates in these major financial systems. Furthermore, concerns about which firms might go bankrupt sent the cost of insuring

Figure 3-1 Interbank Market Rates



against a default on a bond soaring. Thus, costs of borrowing increased for even creditworthy borrowers, putting a strain on the ability of firms to finance themselves.

The Dollar Shortage. Beyond the difficulties of evaluating counterparty risk were the acute shortages of dollar liquidity outside the United States, which were reflected in a steep rise in the cost of exchanging foreign currency for dollars for a fixed period of time (a foreign currency swap). The reasons for the dollar shortage are complex but can be understood by looking at foreign banks' behavior before the crisis. During the boom years, non-U.S. banks acquired large amounts of dollar-denominated assets, often paying for these acquisitions with borrowed dollars rather than with their own currency, thus avoiding the currency mismatch risk of borrowing in one currency and having assets in another. Much of the dollar borrowing was short term and came from U.S. money-market funds. After investors began to pull their money out of these funds in the fall of 2008, that source of lending dried up, and banks were left trying to obtain dollars in other ways. This put pressure on the currency swap market.

Before the crisis, moreover, some banks funded purchases of U.S. assets directly through swaps. In a simplified version of the transaction, foreign banks borrow in their own currency (euros, for example), exchange that currency for dollars through a swap, and then use the dollars to buy U.S. assets. By using a swap market rather than simply purchasing currency, they even out the currency risk (McGuire and von Peter 2009),2 but they are left with a funding risk. If no one will lend them dollars when their swap is due, they may have to sell their dollar assets (some of which may have fallen in value) to pay back the dollars they owe. When banks became very nervous about taking on risk, demand greatly increased the price of currency swaps.

Unwinding Carry Trades. As concerns about the stability of the financial markets heightened over the course of 2008, investors responded by trying to deleverage and reduce some of their exposed risky positions. The desire to undo risky positions coupled with the dollar shortage led to swift movements in currency markets, especially an unwinding of the "carry trade." In the carry trade, an investor borrows money in a low-interest-rate currency (for example, the Japanese yen), sells that currency for a higherinterest-rate currency (for example, the Australian dollar), and invests the money in that currency. If interest rates are 1 percent in Japan and 6 percent in Australia, the investor stands to collect a 5 percent profit if exchange rates do not move. Although economic theory suggests that currency movements should offset this expected profit, over short horizons, if the exchange rate does not move, investors can make a profit. This happened in the mid-2000s, and the carry trade became a favorite strategy for hedge funds and other investors.

The popularity of the trade became self-fulfilling as the continued flows of money into higher-interest-rate currencies helped them appreciate and made the trade even more profitable. But, as the crisis hit, investors tried to reduce their risk and leverage. This unwinding process meant rapid sales of high-interest-rate currencies and rapid purchases of low-interest-rate currencies. Currencies that had low interest rates and had been known as funding currencies (such as the Japanese yen) rose rapidly in value, and the currencies of a number of popular carry-trade destinations (such as Australia, Brazil, and Iceland) depreciated swiftly. Thus, as the crisis hit, borrowing became more expensive and currency markets were increasingly volatile.

The Dollar During the Crisis. Although in many ways the crisis was triggered within U.S. asset markets, the response was not a run on the U.S. dollar; instead the dollar strengthened notably. Some observers had argued that the high U.S. current account deficit and problems in the U.S. housing and other asset markets might lead to an unwillingness to hold U.S. assets more broadly, which could have triggered a depreciation of the dollar. But both the need for foreign banks to cover their dollar borrowing and the need for other investors to repay loans borrowed in dollars (including for carry trades) generated strong demand for dollars. Further, the desire to

<sup>&</sup>lt;sup>2</sup> The swap means they have borrowed dollars and lent euros. In this way, they borrowed euros at home and lent them in the swap, and they owe dollars in the swap but also own dollar assets. Thus, their foreign currency position is balanced.

avoid risky investments at the height of the crisis led to a "flight to safety," with many investors buying dollars and U.S. Treasury bills. As seen in Figure 3-2, the trade-weighted value of the dollar increased 18 percent from July 2008 to its peak in March 2009. The movement of the dollar was broad-based, with sharp appreciations against most major trade partners; the main exceptions were Japan, where the yen appreciated even more against the world as the carry trade unwound, and China, which had reestablished its peg to the dollar in July of 2008 and therefore had a stable exchange rate against the dollar.

Index (Jan. 1997=100), monthly averages 115 110 105 100 95 90 Jan-2005 Jan-2006 Jan-2007 Jan-2008 Jan-2009 Jan-2010

Figure 3-2 Nominal Trade-Weighted Dollar Index

Note: The index is constructed such that an upward movement represents an appreciation of the dollar.

Source: Federal Reserve Board, G.5.

Currency Volatility in Emerging Markets. The deleveraging and fall in risk appetite contributed to large and in some cases sharp swings in the currencies of many emerging economies, but the impact of these large depreciations varied. Some of the sharpest depreciations, such as those in Brazil, Korea, and Mexico, were largely temporary. The currencies of all three countries depreciated more than 50 percent against the dollar between the end of July 2008 and February 2009, but by the end of November 2009 Korea's currency was down only 15 percent and Brazil's only 12 percent. Mexico was still 29 percent below its summer 2008 value.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The starting point for comparison is important. Korea had been depreciating in early 2008 as well, while Brazil and Mexico were appreciating. Thus, by the end of November 2009, Brazil had appreciated slightly from the start of 2008 while Korea had depreciated 24 percent and Mexico 18 percent.

Some countries with large current account deficits faced more pressure. The region with the sharpest declines in the value of its currencies against the dollar was Eastern Europe, where the currencies of Hungary, Poland, and Ukraine all depreciated more than 50 percent between July 2008 and February 2009, and others depreciated nearly as much. These large depreciations resulted in part from the strengthening of the dollar against the euro, as many of these countries are closely tied with Europe, but some of these currencies remained weak even when other countries started to strengthen against the dollar.

A large depreciation can especially lead to broad damage in an economy if there are negative balance-sheet effects. In this setting, a country may have few foreign assets but extensive liabilities denominated in foreign currency. As the exchange rate depreciates, the foreign currency loans become more expensive in local currency. This was particularly a concern in Eastern Europe, where many countries borrowed substantially in foreign currency leading up to the crisis. In Hungary, for example, many individuals took out mortgages in foreign currency. The depreciation of the Hungarian forint thus put pressure on both individuals and bank balance sheets. There was widespread concern that the Western European banks, such as those in Austria, that had made loans in Eastern Europe would face substantial losses. Both the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF) warned of potentially serious bank problems in Austria because of these concerns. By the end of 2009, however, those concerns had not materialized. Austria has had to shore up its banks, but there has not been widespread contagion from Eastern Europe.

During the peak of the crisis, the spreads on emerging-market bonds spiked, but they returned toward more standard levels over time, and outright financial collapse was avoided. There are a number of reasons for the more contained impact of the exchange-rate movements during the crisis. In the past decade, many developing countries have reduced the currency mismatch on their balance sheets by borrowing less, increasing their stocks of foreign exchange reserves, and shifting away from debt finance (Lane and Shambaugh forthcoming). The improved fiscal positions of some countries likely also helped, as did the strong policy response and coordination described later. Some vulnerable countries also benefited from the strengthening of the IMF's lending capabilities (discussed later). The failure of this shock to turn into a series of deep sustained financial collapses across the emerging world was a welcome development that left the world economy better positioned for a quick turnaround.

## The Collapse of World Trade

Despite this crisis's origins in the financial sector, trade rapidly became a crucial source of transmission of the crisis around the world. Exports collapsed in nearly every major trading country, and total world trade fell faster than it did during the Great Depression or any time since. From a peak in July 2008 to the low in February 2009, the nominal value of world goods exports fell 36 percent; the nominal value of U.S. goods exports fell 28 percent (imports fell 38 percent) over the same period. Even countries such as Germany, which did not experience their own housing bubble, experienced substantial trade contractions, which helped spread the crisis. The collapse in net exports in Germany and Japan contributed substantially to their declines in GDP, helping drive these countries into recession. In the fourth quarter of 2008, Germany's drop in net exports contributed 8.1 percentage points to a 9.4 percent decline in GDP (at an annual rate); Japan's net exports contributed 9.0 percentage points to a 10.2 percent GDP decline. Real exports fell even faster in the first quarter of 2009.

Figure 3-3 shows that the drop in the trade-to-GDP ratio during this crisis, from 28 percent to 23 percent in OECD countries, is unprecedented. Trade as a share of GDP had not dropped by more than 2 percentage points from the year before since at least 1970 (the earliest available data), suggesting trade's drop relative to GDP has been larger than in the past. Economists have noted that the responsiveness of trade to GDP has been

Percent 30 28 26 24 22 20 1997:O1 1999:01 2001:Q1 2003:O1 2005:O1

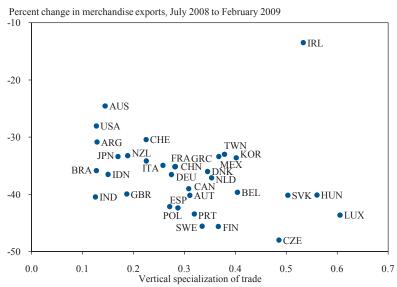
Figure 3-3 OECD Exports-to-GDP Ratio

Source: Organisation for Economic Co-operation and Development, Quarterly National Accounts.

rising over time. Three main reasons for the exceptionally large fall in trade, even given the decline in GDP, have been suggested (Freund 2009; Levchenko, Lewis, and Tesar 2009; and Baldwin 2009).

The first reason is the use of global supply chains (or vertical specialization), where parts of production are manufactured or assembled in different countries and intermediate inputs are shipped from country to country, often from one branch of a firm to another, and then sent to a final destination for finishing. In this case, a reduction in output of one car may involve a decrease in shipments far larger than the final value of that single car. For example, a country that imports \$80 of inputs and adds \$20 of value added before exporting a \$100 good will see GDP fall by \$20 if demand for that good disappears, but trade (measured as the average of imports and exports) will fall \$90. If the decline in demand was concentrated in goods where global supply chains were particularly important, this could help account for the large fall in trade-to-GDP ratios. Estimates are that imported inputs account for, on average, 30 percent of the content of exports in OECD and major emerging market countries, although there is variation across countries within the OECD. Figure 3-4 shows that, with the exception of Ireland, the percentage by which trade declined for a country was

Figure 3-4
Vertical Specialization and the Collapse in Trade



Notes: See text for definition of the vertical specialization of trade. Merchandise exports measured in dollars. Alternate data from Johnson and Noguera (2009), which include the degree to which exports themselves are intermediate inputs, show a similar picture. Sources: Miroudot and Ragoussis (2009); country sources; CEA calculations.

strongly correlated with the extent of that country's vertical specialization (specifically defined as the degree of imported inputs used in exports).

Second, the disruption in global financial markets may have helped generate the trade collapse. Exporters typically require some form of financing to produce their export goods because importers will not pay for them before they arrive. Similarly, importers may need some sort of financing to bridge the gap between when they need to pay for goods and when they will be able to sell them on a domestic market. When liquidity tightened in world financial markets, the cost of trade finance increased. Little high-quality information is available for trade finance because it is typically arranged by banks or from one party to another, rather than through an organized exchange. The data that do exist show a drop in trade finance, but one that is not necessarily larger than the drop in overall trade. The drop in general financing available for producers and consumers, along with the impact of the recession on aggregate demand, may be factors as significant as the specifics of trade finance.4

Finally, the types of products that are traded may have been a critical factor in the trade collapse. Investment goods and consumer durables make up a substantial portion of merchandise trade, representing 57 percent of U.S. exports and 49 percent of U.S. imports in 2006. In a recession, investment spending by firms and purchases of durable goods by consumers often fall more sharply than other components of GDP. Because these investment and purchasing decisions are large and irreversible, they may be delayed until the economic situation is more clear. The drop in spending in these categories during this crisis has been far more severe than in previous recessions in the past 30 years in the United States. Paralleling the movements in overall demand, the collapse in the nominal value of trade was most severe in capital and durable goods and in chemicals and metals, and least severe in services and nondurable goods. The combination of the concentration of the spending reduction in these sectors and the sectors' importance in overall trade appears to be one source of the sharp fall in trade in the crisis.

# The Collapse in Financial Flows

Trade in goods was not the only international flow to collapse. Financial trade evaporated in a way never before seen. U.S. outflows and inflows of finance rose steadily for decades as increasingly integrated capital markets grew in size and scope. By 2007, the average monthly gross purchases and sales of foreign long-term assets by American investors were

<sup>&</sup>lt;sup>4</sup> See Mora and Powers (2009) for a discussion of trade finance in the recent crisis. Levchenko, Lewis, and Tesar (2009) find no support for the notion that trade credit played a role in the reduced trade flows for the United States during the crisis.

\$1.4 trillion, and foreigners' purchases and sales of U.S. long-term assets were \$4.9 trillion. Each group both bought and sold a considerable amount of their holdings, so that net purchases by Americans were \$19 billion a month and net purchases by foreign investors were \$84 billion a month.

When the crisis hit, there was a massive deglobalization of finance that was unprecedented and in many ways more extreme than the collapse in goods and services trade. Figure 3-5 shows that the scale of cross-border flows was cut in half after years of fairly steady climbing. Net purchases by both home and foreign investors actually became negative in the fall of 2008 (that is, there were more sales than purchases). Americans pulled funds home at such a fast pace that from July to November of 2008, Americans on net sold foreign assets worth \$143 billion. Foreign investors also liquidated their positions, selling a net \$92 billion in U.S. holdings. Hence, outflows from foreign investors returning to their home markets were offset in part by inflows from Americans bringing money back to the United States, likely reducing the impact of the outflows.

Trillions of dollars, 3-month moving average 7 6 5 4 3 2 1 0 Jul-1989 Jul-1992 Jul-1995 Jul-1998 Jul-2001 Jul-2004 Jul-2007

Figure 3-5 Cross-Border Gross Purchases and Sales of Long-Term Assets

Source: Department of the Treasury (Treasury International Capital System).

# The Decline in Output Around the Globe

While the triggers of the crisis are generally considered financial in nature, these shocks were rapidly transmitted to the real economy. What had been a financial market shock or a trade collapse became a full-fledged recession in countries around the world. The financial disruption was so

strong and swift in most countries that confidence fell as well. Confidence levels are measured in different ways across countries, but they were generally falling throughout 2008 and reached recent lows in the fall of 2008 and winter of 2009. In many countries, confidence had not been so low in more than a decade.

As noted, world GDP is estimated to have fallen roughly 1.1 percent in 2009 from the year before. The number for the annual average masks the shocking depth of the crisis in the winter of 2008-09, when GDP was contracting at an annual rate over 6 percent. In advanced economies, the crisis was even deeper; the IMF expects GDP to have contracted 3.4 percent in advanced economies for all of 2009. For OECD member countries, GDP fell at an annual rate of 7.2 percent in the fourth quarter of 2008 and 8.4 percent in the first quarter of 2009. Despite the historic nature of its collapse, the U.S. economy actually fared better than about half of OECD economies during those quarters. Figure 3-6 shows the decline in industrial production across major economies, with each of these economies in January 2009 more than 10 percent below its January 2008 level, and Japan faring far worse relative to the other major economies.

Index (Jan. 2008=100) 100 95 United Kingdom 90 85 United States 80 75 70 Japan 65 60 Jan-2008 May-2008 Sep-2008 Jan-2009 May-2009 Sep-2009 Jan-2010 Sources: Country sources.

Figure 3-6 Industrial Production in Advanced Economies

Some emerging market countries collapsed as well, with contractions at an annual rate of over 20 percent in Mexico, Russia, and Turkey, but the collapses were brief—lasting only a quarter or so. On average, the emerging and developing world was quite resilient to the crisis and is projected to have continued to expand in 2009 at a rate of 1.7 percent for the year (these countries contracted in the first quarter, but they began growing quickly in the second quarter). Some regions, such as developing Asia, continued to grow at a robust pace for the year as a whole (over 6 percent), but even that rate is considerably slower than their growth in the mid-2000s. Figure 3-7 shows that industrial production fell in Brazil and Mexico in a manner similar to that in industrial economies, but in China and India it merely stalled for a brief period and then accelerated again. This overall performance in the emerging world is a turnaround from previous crises, where recessions in the advanced countries were followed by sustained collapses in some emerging countries.

Index (Jan. 2008=100) 120 115 China 110 India 105 100 Mexico 95 90 Brazil 85 80 Jan-2008 May-2008 Sep-2008 Jan-2009 May-2009 Sep-2009 Jan-2010 Sources: Country sources.

Figure 3-7
Industrial Production in Emerging Economies

The combination of weak aggregate demand and falling energy prices has meant that price pressure has been starkly absent in this crisis. In fact, lower oil prices have meant that year-over-year inflation numbers were negative in most major countries until toward the end of 2009 (Figure 3-8). Core inflation rates—which exclude volatile energy and food prices—have also been quite low over the year and even negative in Japan. This lack of price pressure has left the world's central banks with more flexibility than they had in the 1970s recessions because they do not have pressing inflation problems to consider. Inflation has also been muted in emerging and developing countries relative to their history; it is estimated

to be 5.5 percent over 2009 and is projected to fall slightly in 2010. As economies and commodity markets strengthened toward the end of 2009, inflation pressure grew in a limited number of countries but was not in any way widespread.

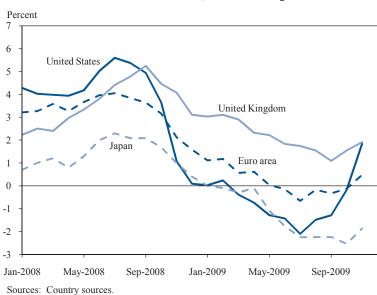


Figure 3-8 Headline Inflation, 12-Month Change

## POLICY RESPONSES AROUND THE GLOBE

Given the severity of the downturn, it is not surprising that policymakers responded with dramatic action. Central banks cut interest rates, governments spent considerable sums in the form of fiscal stimulus, and governments and central banks supported financial sectors with funds and guarantees. Many of these actions were coordinated as policymakers tried to prevent the financial market upheaval and recession from becoming a full-fledged depression.

## Monetary Policy in the Crisis

The response of monetary authorities was both strong and swift across the globe. The major central banks coordinated a significant rate cut of 50 basis points on October 8, 2008, in an attempt to increase liquidity and to boost confidence by demonstrating that they were prepared to act decisively. During the crisis, every member of the Group of Twenty (G-20)

major economies cut interest rates. By March 2009, the Federal Reserve, the Bank of Japan, and the Bank of England had all cut rates to 0.5 percent or less, with the Federal Reserve and the Bank of Japan approaching the zero nominal lower bound. The European Central Bank (ECB) responded slightly more slowly but still cut its policy rate more than 3 percentage points to 1 percent by May 2009 (Figure 3-9). Emerging market countries and major commodity exporters, whose economies were growing fast in the summer of 2008, moved as well, but not to the near-zero levels seen at the major central banks.

Percent 6 United Kingdom 5 Euro area 4 3 United States 2 1 Japan 0 Jan-2008 May-2008 Sep-2008 Jan-2009 May-2009 Sep-2009 Jan-2010 Sources: Country sources; CEA calculations.

Figure 3-9
Policy Rates in Economies with Major Central Banks

Besides cutting interest rates, three of the largest central banks used nonstandard monetary policy as well. As Figure 3-10 shows, the Federal Reserve and the Bank of England more than doubled the size of their balance sheets in 2008 (see Chapter 2 for more details on the Federal Reserve's actions). The two banks bought large quantities of assets, substantially increasing the supply of reserves, and made loans against a variety of asset classes. The goal of these programs was to free up credit in markets that were being underserved through purchases of, or loans against, asset-backed securities and commercial paper. The ECB also expanded its balance sheet substantially (37 percent) in 2008 and made loans against a variety of assets, but it did not undertake the same level of quantitative easing as either the U.S. or U.K. central banks. The Bank of Japan did not expand its balance

sheet on a similar scale.<sup>5</sup> While it did expand some of its lending programs in corporate bond markets, its policies were more oriented to financial markets than to quantitative monetary policy. As noted earlier, Japan's inflation rate has been negative.

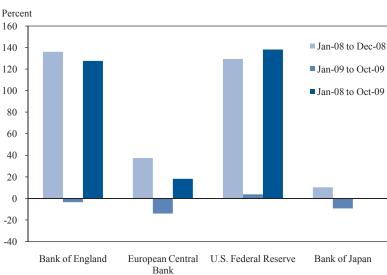


Figure 3-10 Change in Central Bank Assets

Sources: Country sources; CEA calculations.

As Figure 3-10 shows, the rapid growth of central bank balance sheets halted during 2009, but the central banks have not withdrawn the liquidity they injected into the system. Similarly, policy interest rates have remained constant since December 2008 in the United States and Japan and since the spring of 2009 in the euro area and the United Kingdom. Some commodity producers and smaller advanced nations with strong growth have begun to withdraw some monetary accommodation. Australia, Israel, and Norway have all raised policy interest rates. Also, authorities in countries such as China and India had not raised main policy rates as of the end of 2009, but they have made administrative changes that tightened lending to slow the expansion of credit as their economies began to grow more quickly.

In addition to lending support, authorities directly intervened to support the banking sectors in a number of countries. Countries took many actions on their own, ranging from the policies pursued in the United States such as the Troubled Asset Relief Program (discussed in Chapter 2), to direct takeovers of some banks in the United Kingdom, to the creation of other

<sup>&</sup>lt;sup>5</sup> On December 1, 2009, the Bank of Japan announced a roughly \$115 billion increase in lending, equivalent to a nearly 10 percent increase in its balance sheet. This increase was significant but still far below the actions taken by other major central banks.

entities to centralize some bad assets and clean the balance sheets of other banks in Switzerland and Ireland, to general support and guarantees in a wide range of countries.

## Central Bank Liquidity Swaps

In addition to the coordination of rate cuts, one other important form of international coordination took place across central banks. As noted, a dollar funding shortage materialized abroad, as the normal channels for the transmission of dollar liquidity from U.S. markets to the global financial system broke down. This shortage presented a unique set of challenges to central banks. They could have simply provided domestic currency and left banks to sell it for dollars, but the foreign exchange swaps market in which such transactions are usually conducted was severely impaired. Alternatively, central banks could have used dollar reserves to provide foreign currency funds, but few advanced countries (outside of Japan) had sufficient foreign currency holdings to fully address the foreign currency funding needs of their banking systems.

Central banks whose currencies were in demand responded to the shortage by providing large amounts of liquidity to partner central banks through central bank liquidity swaps.<sup>6</sup> In many of these arrangements, the Federal Reserve purchased foreign currency in exchange for U.S. dollars and at the same time agreed to return the foreign currency for the same quantity of dollars at a specific date in the future. When foreign central banks drew dollars in this way to fund their auctions of dollar liquidity in local markets, the Federal Reserve received interest equal to what the foreign central banks were receiving on the lending operations. The Federal Reserve first used these swaps in late 2007 on a relatively small scale. But, as shown in Figure 3-11, from August 2008 through December 2008 these swaps increased from \$67 billion to \$553 billion. This massive supply of liquidity was larger than the available lending facilities of the IMF. The United States extended this program to major emerging market countries as well on October 29, 2008, providing lines of up to \$30 billion each to Brazil, Mexico, Singapore, and Korea.

As the acute funding needs have subsided, nearly all of the central bank swaps have been unwound, and the Federal Reserve has announced that it anticipates that these swap arrangements will be closed by February 1, 2010. There was no long-term funding cost to the Federal Reserve from these swap lines; moreover, the Federal Reserve's counterparties in these transactions were the central banks of other countries, and the loans

<sup>&</sup>lt;sup>6</sup> See Fender and Gyntelberg (2008) for a more comprehensive discussion.

were fully collateralized with foreign currency, so very little credit risk was involved in these transactions.

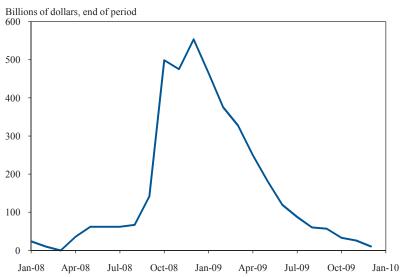


Figure 3-11 Central Bank Liquidity Swaps of the Federal Reserve

Source: Federal Reserve Board, Factors Affecting Reserve Balances of Depository Institutions and Condition Statements of Federal Reserve Banks, H.4.1 Table 1.

Although the dollar funding shortages were unique, the Federal Reserve was not the only central bank to provide swap lines. Some of the more notable examples include the European Central Bank, which made euros available to a number of central banks in Europe, among them the central banks of Denmark, Hungary, and Poland, that felt pressure for funding in euros; the Swedish central bank, which provided support to central banks in the Baltics; and the Swiss National Bank, which provided Swiss francs to the European Central Bank and Poland. Across Asia there was renewed interest in the Chiang Mai Initiative, under which various Asian central banks set up swap lines that could be used in an emergency. Despite the increases in these cross-Asian country swap lines, together they totaled \$90 billion, far less than the available Federal Reserve swap lines, and they were not drawn on during the crisis. In sum, while existing institutional structures (IMF lending or reserves) appear to have been insufficient to meet this aspect of the crisis, the world's central banks innovated to take temporary actions that quelled market disruptions and avoided even sharper financial dislocation.

## Fiscal Policy in the Crisis

In part because major central banks had pushed interest rates as low as they could go and in part because of the magnitude of the crisis, by the beginning of 2009, many countries decided to institute substantial fiscal stimulus. The hope was that government spending could step into the breach left by the collapse of private demand and provide the necessary lift to prevent a slide into a deep recession or worse.

Nearly every major country instituted stimulus, with the exception of some countries hampered by substantial public finance concerns, such as Hungary and Ireland. Every G-20 nation implemented substantial stimulus, with an unweighted average of 2.0 percent of GDP in 2009 (Table 3-1), and many other OECD nations also adopted stimulus plans. Among G-20 countries, China, Korea, Russia, and Saudi Arabia enacted the most extensive stimulus programs in 2009, all equivalent to more than 3 percent of GDP. The U.S. stimulus in 2009 (estimated at 2 percent of GDP) was greater than the OECD's estimate of its member country average (1.6 percent of GDP), but the same as the G-20 average and not quite as extensive as the four high-stimulus nations.

Table 3-1 2009 Fiscal Stimulus as Share of GDP, G-20 Members

Argentina	1.5%	Japan	2.9%
Australia	2.9%	Mexico	1.6%
Brazil	0.6%	Russia	4.1%
Canada	1.8%	Saudi Arabia	3.3%
China	3.1%	South Africa	3.0%
France	0.6%	South Korea	3.7%
Germany	1.6%	Turkey	2.0%
India	0.6%	United Kingdom	1.6%
Indonesia	1.4%	United States	2.0%
Italy	0.1%	All G-20 Nations	2.0%

Note: Values are average of International Monetary Fund and Organisation for Economic Co-operation and Development estimates for nations with expansionary fiscal policies. Sources: Horton, Kumar, and Mauro (2009); Organisation for Economic Co-operation and Development (2009a).

Discretionary fiscal action was not the only form of fiscal stimulus; automatic stabilizers (unemployment insurance, welfare, reduction in taxes collected due to lower payrolls) are triggered when an economy slows down. The size of automatic stabilizers present in an economy appears to be negatively correlated with the size of discretionary stimulus. As Figure 3-12 shows, those countries that already had large automatic stabilizers in place appear to have adopted less discretionary fiscal stimulus, but they were obviously still providing substantial fiscal relief during the crisis.<sup>7</sup>

Discretionary stimulus in 2009 (percent of GDP) Korea Japan 3 Australia New Zealand United States 2 United Kingdom Canada Sweden Mexico Czech Republic Germany Norway 1 Poland France Switzerland Italy 20 30 40 50 2006 tax share (percent of GDP)

Figure 3-12 Tax Share and Discretionary Stimulus

Notes: The regression line is stimulus = 3.8 - 0.06\*(tax share). The coefficient on tax share is significant at the 90 percent confidence level. The R-squared is 0.23. Sources: Organisation for Economic Co-operation and Development, Tax Database Table O.1; Organisation for Economic Co-operation and Development (2009a); Horton, Kumar, and Mauro (2009).

Stimulus is expected to fade slowly in 2010. Overall, the IMF estimates that advanced G-20 countries will spend 1.6 percent of GDP on discretionary stimulus in 2010, compared with 1.9 percent in 2009.8 Emerging and developing G-20 countries will also spend 1.6 percent of GDP in 2010, compared with 2.2 percent in 2009. The IMF projects that among the G-20 countries that adopted large stimulus programs, only Germany, Korea, and Saudi Arabia will increase those programs in 2010. In addition, substantial stimulus will continue into 2010 in Australia, Canada, China, and the United

<sup>&</sup>lt;sup>7</sup> The level of taxation in the economy is used as a proxy for automatic stabilizers. Countries with large levels of taxation see immediate automatic stabilizers because any lost income immediately reduces taxes. Those same countries often tend to have more generous social safety nets (funded by their higher taxes).

<sup>&</sup>lt;sup>8</sup> The averages are calculated by the IMF using PPP GDP weights. That is, the IMF uses the size of an economy—evaluated at purchasing power parity exchange rates, which take into account different prices for different types of goods and services—to weight the different countries in the averages.

States.<sup>9</sup> Thus, substantial fiscal stimulus should continue to support the recovering world economy. The crucial question will be whether sufficient private demand has been rekindled by late 2010 to pick up the economic slack as stimulus unwinds.

## Trade Policy in the Crisis

An extremely welcome development is the policy that was not called on during the crisis: trade protectionism. Frequently viewed as an accelerant of the Great Depression, protectionism has been largely absent during the current crisis. In the Great Depression, trade protectionism came into play after the crisis had started and was not a cause of the Depression itself (Eichengreen and Irwin 2009). But the extensive barriers that built up in the first few years of the Depression meant that as production rebounded, trade levels could not do so. In the current crisis, rather than respond to declining exports with increasing tariffs, countries left markets open, allowing for the possibility of a rebound in world trade. No major country has instituted dramatic trade restrictions. Furthermore, while antidumping and countervailing duty investigations have increased, the value of imports facing possible new import restrictions by G-20 countries stemming from new trade remedy investigations begun between 2008:Q1 and 2009:Q1 represents less than 0.5 percent of those countries' imports (Bown forthcoming).

#### THE ROLE OF INTERNATIONAL INSTITUTIONS

Rather than resort to beggar-thy-neighbor policies, this crisis has been characterized by international policy coordination. National policies did not take place in a vacuum; to the contrary, nations used a number of international institutions to coordinate and communicate their rescue efforts.

#### The G-20

The G-20, which includes 19 nations plus the European Union, was the locus of much of the coordination on trade policy, financial policy, and crisis response. Its membership is composed of most of the world's largest economies—both advanced and emerging—and makes up nearly 90 percent of world gross national product.

The first G-20 leaders' summit was held at the peak of the crisis in November 2008. At that point, G-20 countries committed to keep their markets open, adopt policies to support the global economy, and stabilize the financial sector. Leaders also began discussing financial reforms that would help prevent a repeat of the crisis.

<sup>&</sup>lt;sup>9</sup> Japan has announced additional stimulus since these estimates and will also be providing extensive stimulus in 2010.

The second G-20 leaders' summit took place in April 2009 at the height of concern about rapid falls in GDP and trade. Leaders of the world's largest economies pledged to "do everything necessary to ensure recovery, to repair our financial systems and to maintain the global flow of capital." Furthermore, they committed to work together on tax and financial policies. Perhaps the most notable act of world coordination was the decision to provide substantial new funding to the IMF. U.S. leadership helped secure a commitment by the G-20 leaders to provide over \$800 billion to fund multilateral banks broadly, with over \$500 billion of those funds allocated to the IMF in particular.

In September 2009, the G-20 leaders met in Pittsburgh. They noted that international cooperation and national action had been critical in arresting the crisis and putting the world's economies on the path toward recovery. They also recognized that continued action was necessary, pledged to "sustain our strong policy response until a durable recovery is secured," and committed to avoid premature withdrawal of stimulus. The leaders also focused on the policies, regulations, and reforms that would be needed to ensure a strong recovery while avoiding the practices and vulnerabilities that gave rise to boom-bust cycles and the current crisis. They launched a new Framework for Strong, Sustainable, and Balanced Growth that committed the G-20 countries to work together to assess how their policies fit together and evaluate whether they were "collectively consistent with more sustainable and balanced growth." Further, the leaders committed to act together to improve the global financial system through financial regulatory reforms and actions to increase capital in the system.

Given the central role the G-20 had played in the response to the crisis, it is not surprising that the leaders agreed in Pittsburgh to make the G-20 the premier forum for their economic coordination. This shift reflects the growing importance of key emerging economies such as India and China—a shift that was reinforced by the agreement in Pittsburgh to realign quota shares and voting weights in the IMF and World Bank to better reflect shifts in the global economy.

# The International Monetary Fund

The IMF's role has changed considerably over time, from being the shepherd of the world's Bretton Woods fixed exchange rate system to becoming a crisis manager. In a systemic bank run, a central bank sometimes steps in as the lender of last resort. The IMF is not a central bank and can neither print money nor regulate countries' behavior in advance of a crisis, but it has played a coordinating and funding role in many crises. As the scale of the current crisis became apparent, it was clear that the IMF's funds were insufficient to backstop a large systemic crisis, particularly in advanced nations. While it is still unlikely to be able to arrest a run on major advanced country financial systems, the increase in resources stemming from the G-20 summit has roughly tripled the resources available to the IMF and left it better suited to quell runs in individual countries.

As the IMF's resources were expanded, the institution took a number of concrete interventions. It set up emergency lines of credit (called Flexible Credit Lines) with Colombia, Mexico, and Poland, which in total are worth over \$80 billion. These lines were intended to provide immediate liquidity in the event of a run by investors, but also to signal to the markets that funds were available, making a run less likely. Now, rather than have to go to the IMF for funds during a crisis, these countries are "pre-approved" for loans. In each of these countries, markets responded positively to the announcement of the credit lines, with the cost of insuring the countries' bonds narrowing (International Monetary Fund 2009b). The IMF also negotiated a set of standby agreements with 15 countries, committing a total of \$75 billion to help them survive the economic crisis by smoothing current account adjustments and mitigating liquidity pressures. analysis suggests that this program discouraged large exchange-rate swings in these countries (International Monetary Fund 2009b). These actions as well as the very existence of a better-funded global lender may have helped to keep the contraction short and to prevent sustained currency crises in many emerging nations.

#### THE BEGINNING OF RECOVERY AROUND THE GLOBE

In contrast to the Great Depression, where poor policy actions—monetary, fiscal, regulatory, and protectionist—helped turn a sharp global downturn into the worst worldwide collapse the modern economy has known, the recent massive policy response helped stop the spiraling of this Great Recession. Already financial markets have stabilized, GDP has begun to grow, and trade has begun to rebound. The crisis is far from over, however; most notably, employment in many countries is still distressingly weak. But the world economy appears to have avoided the outright collapse that was feared at one point and is now moving toward recovery.

The second quarter of 2009 saw the first hints of recovery in many countries. World average growth was 2.4 percent, and even OECD countries registered a positive 0.2 percent growth rate.<sup>10</sup> The rebound caught many by surprise. The IMF and the OECD had revised projections steadily

World weighted average quarterly real GDP growth rates at a seasonally adjusted annual rate are from CEA calculations. The OECD growth rate is from the OECD quarterly national accounts database.

downward through the winter and spring, but by the middle of 2009 many economies had returned to growth. The one-quarter improvement in annualized growth of 5.7 percentage points (from -6.4 percent to -0.7 percent from the first to the second quarter of 2009) in the United States was one of the largest improvements in decades, but other countries that had deeper contractions rebounded even more. Annualized growth rates improved more than 14 percentage points in Germany and Japan, while growth rates rose more than 30 percentage points in Malaysia, Singapore, Taiwan, and Turkey. Other emerging markets, such as China, India, and Indonesia, which did not contract but faced lower growth during the crisis, rebounded to growth rates on par with their performance during the 2000s (if not the rapid booms of 2006-07).

Trade had collapsed quickly, and it has begun to rebound quickly as well. Beginning in March, when GDP was still falling rapidly, exports began to turn. From lows in February 2009, nominal world goods exports in dollar terms had grown 20 percent by October. U.S. nominal goods exports picked up later but had grown 17 percent from their April lows by October. As GDP began to rise, trade volume began to grow faster. Annualized growth for world real exports was 2.4 percent in the second quarter of 2009 and 16.8 percent in the third quarter. By comparison, world weighted average annualized real GDP growth in the second and third quarters of 2009 was 2.4 percent and 3.4 percent, respectively.

Financial markets are rebounding as well. Net cross-border financial flows are near their pre-crisis levels, and gross flows are increasing (although as of October 2009 they were still less than 80 percent of their average level in 2008). Libor-OIS spreads have fallen to more typical levels, and equivalent measures in other markets have subsided as well. Stock market indexes in the United States, Japan, the United Kingdom, and the European Union have all risen substantially. By October 2009, all were above their levels in October 2008, making up dramatic losses in early 2009. House prices have stabilized in most markets. Furthermore, the cost of insuring emergingmarket bonds, which had spiked in the fall of 2008, is now back roughly to its pre-crisis level. The value of the dollar, which rose dramatically during the crisis, has retreated toward its value before the crisis (see Figure 3-2). From the end of March 2009 through December, the dollar depreciated 10 percent against a basket of currencies. The trade-weighted value is roughly at the same level as in the fall of 2007 and above its lows in 2008.

Potential financial problems still exist. Banks around the world may not have recognized all the losses on their balance sheets. The shock waves from the threatened default by Dubai World in November 2009 showed that there are still concerns in the market about potential bad debts on

various entities' balance sheets. There also are concerns in some countries that asset prices may be rising ahead of fundamentals. But the crush of near-bankruptcy across the system has clearly eased.

## The Impact of Fiscal Policy

The broad financial rescues and the monetary policy responses played crucial roles in stabilizing financial markets. Fiscal policy also played an essential role in the macroeconomic turnaround. A simple examination of G-20 advanced economies shows that while they all had broadly similar GDP contractions during the crisis, the high-stimulus countries—despite having much smaller automatic stabilizers—grew faster after the crisis than countries that adopted smaller stimulus packages. Table 3-2 shows the 2009 discretionary fiscal stimulus as a share of GDP, the tax share of GDP (which is a rough estimate of automatic stabilizers), as well as the GDP growth during the two quarters of crisis (2008:Q4 and 2009:Q1) and the second quarter of 2009 when growth resumed in many countries. Growth reappeared first in the high-stimulus G-20 countries.

Table 3-2 Stimulus and Growth in Advanced G-20 Countries

	Stimulus (% of GDP)	Stabilizers (% of GDP)	Growth during:	
			Crisis (%)	2009:Q2 (%)
High stimulus	3.2	28.4	-7.1	5.4
Mid stimulus	1.7	35.3	-8.3	-1.3
Low stimulus	0.3	43.2	-7.4	-0.3
United States	2.0	28.0	-5.9	-0.7

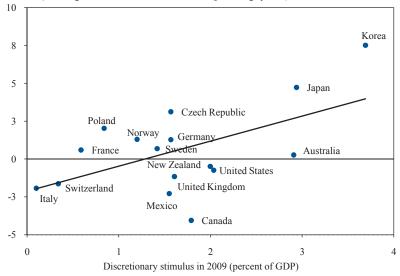
Notes: High countries are Australia, Japan, and Korea; middle countries are Canada, Germany, and the United Kingdom; low countries are France and Italy. Growth rates are annualized. Crisis refers to Q4:2008 and Q1:2009.

Sources: Organisation for Economic Co-operation and Development, Tax Database Table 0.1; Horton, Kumar, and Mauro (2009); Organisation for Economic Co-operation and Development (2009a); country sources.

Countries may have different typical growth patterns, however. Thus, to understand the impact of fiscal stimulus, one must estimate what would have happened had there been no stimulus—a counterfactual. Private sector expectations in November 2008—after the crisis had begun but before most stimulus packages were adopted—can serve as that counterfactual. Thus, one can compare actual growth minus predicted growth with the degree of stimulus to see whether those countries with large stimulus packages outperformed expectations once the stimulus policies were in place. The second quarter of 2009 is used as the test case. Figure 3-13 shows actual growth minus expected growth compared with 2009 discretionary fiscal

Figure 3-13 Outperforming Expectations and Stimulus

Actual Q2 GDP growth minus November forecast (percentage points)



Notes: The regression line is (growth - forecast) = -2.1 + 1.65 \* stimulus. The coefficient on stimulus is significant at the 95 percent confidence level. The R-squared is 0.31. Sources: J.P. Morgan Global Data Watch, Global Economic Outlook Summary Table, November 7, 2008; Horton, Kumar, and Mauro (2009); Organisation for Economic Co-operation and Development (2009a); country sources; CEA calculations.

stimulus for the OECD countries for which private sector forecasts were available on a consistent date. 11 Countries with larger stimulus on average exceeded expectations to a greater degree than those with smaller stimulus packages. The two countries in this exercise with the largest stimulus packages, Korea and Japan, outperformed expectations by dramatic amounts. Countries such as Italy that had virtually no stimulus performed worse than most. Among non-OECD countries, China had one of the largest fiscal stimulus packages, and in the second quarter of 2009 its growth was both rapid and far in excess of what had been expected in November 2008. Fiscal

<sup>&</sup>lt;sup>11</sup> Stimulus is measured as in Table 3-1, using IMF and OECD estimates of 2009 fiscal stimulus. Forecasts are from J.P.Morgan. See Council of Economic Advisers (2009) for more details. That report examines more countries and a set of time series forecasts in addition to the private sector (J.P.Morgan) forecasts. The results are quite similar with a simple time series forecast. Results are slightly weaker with a broader sample, but that is not surprising because the swings in the economies in emerging markets were quite severe and difficult to predict, and the stimulus policies may operate somewhat differently in those nations. Council of Economic Advisers (2009) used Brookings estimates as well as OECD and IMF, but those ceased being updated in March, and thus this analysis uses only IMF and OECD estimates. Using the June estimates alone slightly weakens the results because stimulus announced late in the second quarter likely had little impact on growth in that quarter.

stimulus seems to have been important in restarting world economic growth in the second quarter of 2009.

After the second quarter of 2009, the relationship between stimulus and growth weakens somewhat. High-stimulus countries still exceed expectations relative to low-stimulus countries, but the relationship is not statistically significant. It may be that quarterly growth projections made nearly a year in advance are not precise enough a measure of a third-quarter growth counterfactual.

### The World Economy in the Near Term

While the return to GDP and export growth is encouraging, exports are still far below their level in the summer of 2008, and GDP is now far below its prior trend level. The IMF currently forecasts annual world growth of 3.1 percent in 2010; the OECD projects 3.4 percent. For advanced countries, the forecasts are even more restrained: the IMF projects 1.3 percent, the OECD 1.9 percent for OECD countries. The IMF forecasts world trade to grow 2.5 percent in 2010; the OECD, 6.0 percent. These forecasts may be conservative. The IMF forecast would leave trade at a much lower share of GDP than before the crisis, and even if trade growth met the OECD's more aggressive forecast, trade would not reach its previous level as a share of GDP for some time. Given that trade declined faster than GDP in the crisis, it is possible it will continue to bounce back faster as well, surpassing these estimates.

How Fast Will Countries Grow? There is an open question about how fast countries will grow following the crisis. After typical recessions, the magnitude of a recovery often matches the depth of the drop. In this way, GDP returns not only to its previous growth rate, but to its previous trend path as well. If, however, the world's advanced economies emerge from the crisis only slowly and simply return to stable growth rates, output will be on a permanently lower path. A financial crisis could lower the future level of output by generating lower levels of labor, capital, or the productivity of those factors. If the economy returns to full employment, and productivity growth remains on trend, though, capital should eventually return to its pre-crisis path because the incentives to invest will be high. Thus, as long as the economy eventually returns to full employment, the long-run impact of the crisis chiefly rests on productivity growth in the years ahead. Chapter 10 discusses the prospects and importance of productivity in more detail.

Some research suggests financial crises may result in a slow growth pattern (International Monetary Fund 2009a), with substantial average

<sup>&</sup>lt;sup>12</sup> IMF estimates are from International Monetary Fund (2009a). OECD estimates are from Organisation for Economic Co-operation and Development (2009b).

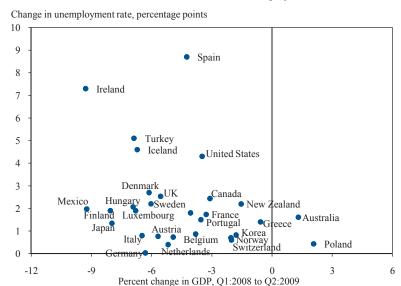
losses in the level of output in the years following a financial crisis. The same research, however, shows a wide variety of experiences following crises, with a substantial number of countries returning to or exceeding the pre-crisis trend level path of GDP. It is far too early to project the likely outcome of this recession and recovery, but there is hope that the aggressive policy responses and the potential for a sharp uptick in world trade—bouncing back with responsiveness similar in magnitude to its downturn—will return the path of GDP to previous trend levels in many economies.

Concerns about Unemployment. One reason for the great concern about the pace of growth after the recession is the current employment situation. What was a financial crisis and then a real economy and trade crisis has rapidly become a jobs crisis in many advanced economies. The OECD projects the average unemployment rate in OECD countries will have risen 2.3 percentage points from 2008 to 2009, with an average jobless rate of 8.2 percent in 2009. More worryingly, the OECD projects the group average will continue rising in 2010, and in some areas (such as the euro area) the jobless rate is expected to be even higher in 2011.

The United States has been an outlier in the extent to which the GDP contraction has turned into an employment contraction. Figure 3-14 shows the change in GDP and in the unemployment rate from the first quarter of 2008 to the second quarter of 2009. Typically, one would expect a line running from the upper left to the lower right because countries with small declines in GDP (or even increases) would have small increases in unemployment (lower right) and those with larger declines in GDP would have larger increases in unemployment (upper left). Countries broadly fit this pattern during the current crisis and recovery, but there are a number of aberrations. Germany saw a large contraction in GDP, and while growth has resumed, its one-year contraction was still sizable. Still, Germany's unemployment rate barely increased. In contrast, the United States suffered a relatively mild output contraction (for an OECD country), and yet it has had the largest jump in the unemployment rate outside of Iceland, Ireland, Spain, and Turkey, all of which had larger GDP declines.

There are several partial explanations for the large variation in the GDP-unemployment relationship across countries. The more flexible labor markets in the United States make the usual response of unemployment to output movements larger than in most other OECD countries; and, as discussed in Chapter 2, the rise in U.S. unemployment in the current episode has been unusually large given the output decline. Another factor is a policy response in some countries aimed at keeping current employees in current jobs. The extreme example of such a policy has been Germany's Kurzarbeit (short-time work) program, which subsidizes companies that put workers

Figure 3-14
OECD Countries: GDP and Unemployment



Sources: Organisation for Economic Co-Operation and Development, Quarterly National Accounts and Key Short-Term Economic Indicators; country sources.

on shorter shifts rather than firing them. The OECD estimates the German unemployment rate would be roughly 1 percentage point higher without the program. Because such programs benefit only those who already have jobs, they could hold down unemployment at the cost of a more rigid labor market. Labor market flexibility is generally seen as allowing lower unemployment on average over the course of the business cycle and as permitting a more efficient distribution of labor resources, thus enhancing productivity.

#### Global Imbalances in the Crisis

In addition to the unambiguous signs of problems in the U.S. economy going into the crisis, there were clear signals that the global economy was not well balanced. Global growth was strong from 2002 to 2007, but the growth was not well distributed around the world economy, with fast growth in some emerging markets and sluggish growth in some advanced economies. Further, that growth came with mounting imbalances in saving and borrowing across the world. U.S. saving was very low, which led to substantial borrowing from the rest of the world. Home price bubbles and overborrowing were not exclusive to the United States; the United Kingdom, Spain, and many other economies also borrowed extensively, helping inflate

asset prices in those economies. This borrowing was paired with very high saving in some countries, particularly in emerging Asia.

The extent to which the global imbalances were a cause of the crisis or represented a symptom of poor policy choices in different countries is a question of active debate (see Obstfeld and Rogoff 2009 for discussion). The current account (net borrowing from or lending to the rest of the world) can be defined as a country's saving minus its investment. Thus, some argue that forces in the rest of the world cannot be deterministic of a country's current account balance. A country saves or borrows based on its own choices. In this formulation, the imbalances were merely a symptom. In fact, some argued the imbalances were beneficial because savings were channeled away from inefficient financial markets in poor countries toward what were thought to be more efficient markets in rich countries. Conversely, some argue that the influx of global savings into the United States distorted incentives by keeping interest rates too low and led to overborrowing and asset bubbles. In this view, the imbalances played a leading role in the crisis.

The truth almost certainly lies somewhere in between. The influx of global savings into the United States did lower borrowing rates and encouraged more spending and less saving within the U.S. economy. This may have allowed the credit expansion and related asset price bubbles to continue longer than they could have otherwise. At the same time, even if the global savings in some sense led to U.S. borrowing, the failure of the financial system to use that borrowing productively and the failure of regulation to make sure risk was being treated appropriately were surely partly to blame for the crisis.

As the U.S. economy seeks to find a more sure footing and a growth path less dependent on borrowing and bubbles, world demand needs to be redistributed so that it is less dependent on the U.S. consumer and does not cause global imbalances to reappear and contribute to distortions in the economy. Fixing the imbalances can help provide more demand for the U.S. economy. But these imbalances also need to be treated as symptoms of deeper regulatory and policy failures. Fixing the imbalances alone will not prevent another crisis.

Since the onset of the crisis, the imbalances have partially unwound (the likely future path of the U.S. current account is discussed in more detail in Chapter 4). The U.S. current account deficit, which had built to over 6 percent of GDP in 2006, was on a downward path before the crisis struck in full force, falling to under 5 percent of GDP at the start of 2008. After the crisis hit, it fell below 3 percent of GDP in the first quarter of 2009. Major surplus countries-China, Germany, and Japan-have all seen a reduction in their current account surpluses from the highs of 2007. In all three

cases, the surpluses have stabilized at substantial levels (in the range of 3–5 percent of GDP), but they are notably down from their highs. One essential part of the response to the crisis has been the substantial fiscal stimulus implemented by these three countries, which has helped demand in these countries stay stronger than it otherwise would have been.

Figure 3-15, which shows current account imbalances scaled to world GDP, demonstrates how much of total world excess saving or borrowing is attributable to individual countries. As the figure makes clear, by 2005 and 2006, the United States was borrowing nearly 2 percent of world GDP, and by the end of 2008, China was lending nearly 1 percent of world GDP. During the crisis, the surpluses of OPEC (Organization of Petroleum Exporting Countries) countries, Japan, and Germany contracted, and the United States is now borrowing less than 1 percent of world GDP. China's surplus is also smaller than before the crisis, but China is still lending nearly 0.5 percent of world GDP, and OPEC surpluses may rise as well. But by the third quarter of 2009, the degree of imbalance was substantially lower than just a year earlier. There is hope that the short-run moves in these current account balances are not simply cyclical factors that will return quickly to

Share of world GDP, percent 2.5 2.0 1.5 1.0 0.5 0.0 -0.5-1.0 -1.5 -2.0 Other Nations OPEC ■ Japan Germany ■ China ■ United States -2.5 2005 2006 2007 08:Q1 08:Q2 08:Q3 08:Q4 09:Q1 09:Q2 09:Q3

Figure 3-15 Current Account Deficits or Surpluses

Notes: Sample limited by data availability. In the figure, OPEC includes Ecuador, Iran, Kuwait, Saudi Arabia, and Venezuela; and Other Nations includes all other countries with quarterly current account data. Third quarter 2009 data for both OPEC and Other Nations were incomplete at the time of writing.

Sources: Country sources; CEA estimates.

former levels but rather that they represent a more sustained rebalancing of world demand.

Net export growth is often a key source of growth propelling a country out of a financial crisis. But in a global crisis, not every country can increase exports and decrease imports simultaneously. Someone must buy the products that are being sold, and the world's current accounts must balance out. Thus far, the crisis has come with a reduction in imbalances, with strong growth and smaller surpluses in many surplus countries. Whether these shifts become a permanent part of the world economy or policies and growth models revert to the pattern of the 2000s will be an important area for policy coordination.

#### Conclusion

The period from September 2008 to the end of 2009 will be remembered as a historic period in the world economy. The drops in GDP and trade may stand for many decades as the largest worldwide economic crisis since the Great Depression. In contrast to the Depression, however, the history of the period may also show how aggressive policy action and international coordination can help turn the world economy from the edge of disaster. The recovery is unsteady and, especially with regard to unemployment, incomplete, but compared with a year ago, the positive shift in trends in the world economy has been dramatic.



#### CHAPTER 4

## SAVING AND INVESTMENT

The United States appears poised to begin its recovery from the most severe recession since the Great Depression. But as discussed in Chapter 2, the recession has been unusually deep, and the crisis has caused declines in credit availability as well as weak consumer and business confidence. As a result, achieving the private spending necessary to support a robust and full recovery has been, and will continue to be, challenging.

Moreover, as the President has repeatedly emphasized, it is not enough simply to return to the path the economy was on before the slump. The growth that preceded the recession saw high consumption spending, low private saving, excessive housing construction, unsustainable run-ups in asset prices (especially for assets related directly or indirectly to housing), and high budget and trade deficits. That path was unstable—as we have learned at enormous cost—and undermined long-run prosperity. Thus, as the economy recovers, a rebalancing will be necessary. The composition of spending needs to be reoriented in a way that will put us on a path to sustained, stable prosperity.

In thinking about the twin challenges of recovery and reorientation, it is useful to consider the division of demand into its components. Overall or aggregate demand can be classified into personal consumption expenditures, residential investment, business investment, net exports, and government purchases of goods and services. Government purchases, which consist of such items as Federal expenditures on national defense and state and local spending on education, are relatively stable. This is especially true when one recalls that government transfers, such as spending on Medicare or Social Security, are not part of government purchases but rather are elements of personal income. Thus, it is the behavior of the remaining components that will be central to addressing the challenges of generating enough demand for recovery and a better composition of demand for long-run growth and stability.

This chapter lays out a picture of how the components of private demand behaved during the downturn and how they are likely to evolve as the economy recovers and once it returns to full employment. The chapter describes the transition that has already occurred away from low personal saving and high residential investment, as well as the transition that needs to occur toward greater business investment and net exports. It also describes the President's initiatives for encouraging the transitions necessary for long-run prosperity and stability.

#### THE PATH OF CONSUMPTION SPENDING

Figure 4-1 shows the share of gross domestic product (GDP) that takes the form of production of goods and services directly purchased by consumers. The figure has two key messages. First, consumption represents a substantial majority of output. As a result, movements in consumption play a central role in macroeconomic outcomes. Second, the fraction of output devoted to consumption has been rising over time, leaving less room for components that contribute to future standards of living. The behavior of consumption will therefore be central to addressing both the shorter-run challenge of generating a strong recovery and the longer-run challenge of rebalancing the economy.

Percent 

Figure 4-1
Personal Consumption Expenditures as a Share of GDP

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.10.

## The Determinants of Saving

To understand the behavior of consumption, it is critical to consider how households divide their disposable income between consumption and saving. Figure 4-2 shows the personal saving rate (that is, the ratio of saving to disposable personal income) since 1960 (left axis), along with the ratio of household wealth to disposable personal income (right axis).

Percent, seasonally adjusted Ratio, seasonally adjusted Wealth-to-income ratio Saving rate (left axis) (right axis) 12 6 10 5.5 8 6 5 4 4.5 2 0 1960 1965 1975 1980 1985 1990 2000 2010

Figure 4-2 Personal Saving Rate Versus Wealth Ratio

Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 2.1; Federal Reserve Board, Flow of Funds Table B.100.

The big swings in wealth reflect asset market booms and busts. Much of the drop in wealth in the early 1970s reflects the stock market decline associated with the first oil price shock. The stock market booms of the mid-1980s and the late 1990s are obvious, as is the decline in stock prices in the early 2000s. The wealth decline in 2008-09 was the largest such experience in the sample, reflecting large contributions from falling house prices as well as stock prices.

Paralleling the behavior of the consumption-output ratio, the saving rate showed no strong trend before roughly 1980. But it has shown a marked downward trend since then. Economic theory suggests a variety of factors that should influence saving, most notably changes in the demographic structure of the population, the growth rate of income, and the real after-tax interest rate. None of these three factors, however, provides a compelling explanation for the fluctuations in the saving rate evident in the figure.

Indeed, some of the factors should probably have pushed saving up in recent decades, not down. A 1991 study, for example, predicted that the saving rate would rise as the baby boom generation entered its high-saving preretirement years (Auerbach, Cai, and Kotlikoff 1991). Instead, the saving rate fell steadily as the boomers approached retirement (the first boomers claimed early Social Security benefits in 2008).

Figure 4-2 suggests to the eye, and statistical analysis confirms, a strong negative association between the saving rate and the wealth-to-income ratio. This relationship has been interpreted as reflecting the effect of wealth on spending: a run-up in wealth leads to less need for saving. Such an interpretation is unsatisfying, however, because it leaves a key question unanswered: If wealth movements cause saving rate movements, what causes wealth movements? More broadly, it leaves open the possibility that both saving choices and asset price movements are a consequence of some deeper underlying force. For example, an increase in optimism about future economic conditions might lead both to a spending boom and to a general bidding up of asset prices. In that case, the true moving force would not be wealth changes per se; instead, both asset prices and saving would be responding to the increase in optimism.

Survey data measuring "consumer sentiment" or "consumer confidence" do, in fact, have substantial forecasting power for near-term spending growth, and are also associated with contemporaneous movements in asset prices (Carroll, Fuhrer, and Wilcox 1994). Such surveys are therefore a useful part of a macroeconomist's forecasting tool kit. But such surveys have not proven useful in explaining long-term trends like the secular decline in the saving rate.

Emerging economic research suggests another underlying explanation that may be more potent: movements in the availability of credit. A substantial academic literature has documented the expansion of credit since the era of financial liberalization that began in the early 1980s (Dynan 2009). Many factors have contributed to this expansion; perhaps the most prominent explanation (aside from the liberalization itself) is the telecommunications and computer revolutions, which together have permitted the construction of ever-more-detailed databases on consumer credit histories, giving creditors a far more precise ability to tailor credit offers to the personal characteristics of individual borrowers (Jappelli and Pagano 1993). A beneficial effect of this information revolution has been that many people who had previously been unable to obtain credit have for the first time been able to borrow to buy a home, to start a business, or to undertake many other useful activities (Edelberg 2006; Getter 2006).

A reduction in saving, however, is almost the inevitable consequence of a general increase in the ability to borrow. If there is less need to save for a down payment for a home, for a child's education, for unforeseen emergencies, or for spending of any other kind, then the likelihood is that less saving will be done. Of course, eventually the saving rate should mostly recover from any dip caused by a one-time increase in the availability of credit, because whatever extra debt was incurred must be paid back over time (and paying back debt is another form of saving). This recovery in saving, however, may take a long time. If, in the meantime, credit availability increases again, the gradual small increase in saving that reflects debt repayment could easily be obscured by the new drop in saving occasioned by the continuing expansion in credit availability.

How much of the decline in the saving rate was due to a gradual, but cumulatively large, increase in credit availability is not easy to determine, partly because an aggregate measure of credit availability is difficult to construct. Recent research on commercial lending has argued that a good measure of the change in credit supply is provided by the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices, in which managers at leading financial institutions are asked for their assessments of credit conditions for businesses (Lown and Morgan 2006). Building on that research, one study has proposed that a measure of the level of credit availability to consumers can be constructed simply by accumulating the sequence of readings from this survey's measure of credit availability to consumers (Muellbauer 2007).1

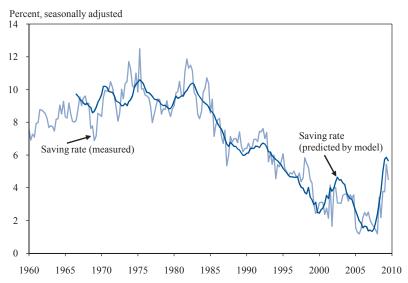
Economic theory suggests that one further element may be important in understanding spending and saving choices around times of recession: the intensity of consumers' precautionary motive for saving. Because the risk of becoming unemployed is perhaps the greatest threat to most people's future financial stability, the unemployment rate has sometimes been used as a proxy for the intensity of the precautionary saving motive.

## Implications for Recent and Future Saving Behavior

Figure 4-3 shows the relationship between the measured saving rate and a simple statistical model that relates the saving rate to the wealth-toincome ratio, a slightly modified version of Muellbauer's credit availability index, and the unemployment rate. The statistical model is estimated over the sample period 1966:Q3 to 2009:Q3. All three variables have statistically important predictive power, with the two most important measures being the measure of credit conditions and the wealth-to-income ratio.

<sup>&</sup>lt;sup>1</sup> Specifically, each quarter the survey asks about banks' willingness to make consumer installment loans now as opposed to three months ago.

Figure 4-3 Personal Saving Rate: Actual Versus Model

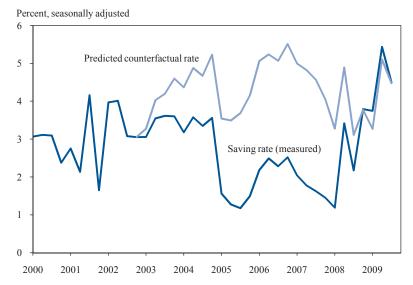


Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 2.1; CEA calculations.

Figure 4-4 uses this simple framework to ask what the path of the saving rate might have looked like if the increase in credit availability and the housing price boom had not occurred. (To be exact, the figure shows what the model says the saving rate would have been if the wealth-to-income ratio had remained constant from the first quarter of 2003 to the fourth quarter of 2007, and if credit conditions had neither expanded nor contracted; the first quarter of 2003 is chosen as the starting point because in that quarter the wealth-to-income ratio was close to its average historical value.) In this counterfactual history, the personal saving rate would have been, on average, about 2 percentage points higher over the 2003–07 period.

Of course, a far more important consequence than the higher saving rate might have been the avoidance of the financial and real disturbances caused by the housing price boom and subsequent crash. But taking the crash as given, Figure 4-3 shows that the model does a reasonably good job in tracking the dynamics of the saving rate over the period since the business cycle peak. All three elements of the model contribute to the model's predicted rise in the personal saving rate over the past couple of years: the increase in the unemployment rate, the sharp drop in asset values evident in Figure 4-2, and the steep drop in credit availability as measured by the Senior Loan Officer Opinion Survey.

Figure 4-4 Actual Personal Saving Versus Counterfactual Personal Saving



Sources: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 2.1; CEA calculations.

The saving model also has implications for the future path of spending. Because of the important role it finds for credit availability, the model suggests that the speed of the recovery in spending is likely to be closely tied to the pace at which the financial sector returns to health. This point underscores a chief motivation for the Administration's efforts to repair the damage to the financial system: a full economic recovery is unlikely until and unless the financial system is repaired. The vital role that a healthy financial sector plays in the functioning of the economy explains the urgency with which the Administration has been pressing Congress to pass a comprehensive and effective reform of the financial regulatory system (see Chapter 6 for a detailed discussion of the Administration's proposals).

Over a longer time frame, a resumption seems unlikely of the past pattern in which credit growth persistently outpaces income growth. Instead, credit might reasonably be expected to expand, in the long run, at a pace that roughly matches the rate of income growth. Similarly, in keeping with the long-run stability of the wealth-to-income ratio evident in Figure 4-2, wealth plausibly might grow at roughly the same pace as income—or perhaps a bit faster if investment can sustain an increase in capital per worker. Finally, although unemployment is likely to remain above its normal rate for some time, it too can be expected to return to historically normal values in the medium run. Under these conditions, the model suggests that the personal saving rate will eventually stabilize somewhere in the range of 4 to 7 percent, somewhat below its level in the 1960s and 1970s, but well above its level over the past decade.

The saving rate has already risen sharply over the past two years (which reflects an even steeper drop in consumption than in income). As credit conditions and the unemployment rate return to normal, it is plausible to expect a temporary partial reversal of the recent increase, even if asset values do not return to their pre-crisis levels. It would not be surprising, therefore, if the saving rate dipped a bit over the next year or two before heading toward a higher long-run equilibrium value. The prospect of temporary fallback in the saving rate is also plausible as a consequence of the expected withdrawal of some of the temporary income support policies that were part of the stimulus package. On balance, however, the United States seems now to be on a trajectory that will eventually result in a more "normal," and more sustainable, pattern of household saving and spending than the one that has prevailed in recent years.

While the underlying economic forces sketched here seem likely to lead eventually to a higher saving rate even in the absence of policy changes, the Administration has proposed a variety of saving-promoting policy changes to enhance that trend over the longer term. These include increasing the availability of 401(k)-type saving plans and encouraging employers to gradually increase default contribution rates (and to ensure that new employees' default saving choices reflect sound financial planning). Economic research suggests that people assume that if their employer offers a retirement saving plan, the default saving rate in that plan probably reflects a reasonably good choice for them, unless their circumstances are unusual (Benartzi and Thaler 2004).

# THE FUTURE OF THE HOUSING MARKET AND CONSTRUCTION

The boom in construction spending that characterized the middle years of the past decade made a substantial contribution to growth while it lasted. When the residential investment engine began to sputter around the middle of 2006, and then to stall, the ensuing correction in the sector was correspondingly steep. With the benefit of hindsight, it is now clear that much of the mid-decade's frenetic activity was based on unsound financial decisions rather than sustainable economic developments. As a consequence, construction has declined to below-normal levels as the excesses work off. For the future, construction activity is expected to pick up and

contribute to the economic recovery, although this activity is likely to be well below the very high levels it reached in the mid-2000s.

## The Housing Market

The residential investment boom can be measured in several ways. As Figure 4-5 shows, new construction of single-family housing units soared in the first half of the 2000s. Builders were constructing 30 percent more single-family housing units a year in the expansion of the 2000s than in the 1990s boom. Housing investment as a share of GDP averaged more than 5.5 percent over the 2002–06 period, compared with an average of only 4.7 percent from 1950 to 2001. Figure 4-6 shows that from 1995 to 2005 the homeownership rate rose from 65 percent to 69 percent as mortgage underwriting standards loosened, especially in the later part of the period.

Thousands, seasonally adjusted annual rate 2,000 1,800 1.600 1.400 1,200 1,000 800 600 400 200 0 1990 1995 1980 1985 2000 2005 2010

Figure 4-5 Single-Family Housing Starts

Source: Department of Commerce (Census Bureau), New Residential Construction Table 3.

It is now apparent that the mid-2000s level of new construction was unsustainable. Analysis by the Congressional Budget Office (2008) and Macroeconomic Advisers (2009) suggests the mid-2000s pace of starts was well in excess of the underlying pace of expansion in demand for new housing units based on household formation and other demographic drivers.

Figure 4-6 Homeownership Rate



Source: Department of Commerce (Census Bureau), Residential Vacancies and Homeownership Table 4.

The boom was followed by an equally dramatic bust. From their peak in the third quarter of 2005 to the first quarter of 2009, single-family housing starts fell by more than a factor of four. The homeownership rate reversed course, and by the second quarter of 2009 had returned to its 2000 level. The share of housing investment in GDP plummeted to 2.4 percent in the second quarter of 2009.

Just as the mid-decade's high levels of construction and housing market activity were not sustainable, the recent extremely low levels of construction will not persist indefinitely. In 2009, housing starts and the share of housing investment in GDP were well below their previous historical lows. In the long run, sounder underwriting standards will require more would-be homeowners to take time to save for a down payment before buying a home, suggesting that the homeownership rate will ultimately settle at a level lower than its recent peaks. Nonetheless, as the population grows and the housing stock depreciates, new residential construction will be required to meet demand. The analyses by the Congressional Budget Office (2008) and Macroeconomic Advisers (2009) suggest that the underlying demographic trend of household formation is consistent with growth in demand of between 1.1 million and 1.3 million new singlefamily housing units per year, more than double the pace of single-family housing starts in November 2009. Indeed, since the second quarter of 2009, housing construction has already rebounded a bit, making its first positive

contribution to GDP growth in the third quarter of 2009 since the end of 2005. But, as described in Chapter 2, the stocks of new homes and existing homes for sale, vacant homes that are not currently on the market, and homes that are in the process of foreclosure and that are likely to be put on the market at some point remain high. As a result, construction demand is likely to rise to its long-run level only gradually while some demand is met by the stock of existing units.

In short, as the housing market stabilizes and returns to a more normal condition, its role as a major drag on economic growth seems to be ending, and it is likely to contribute to the recovery. But residential construction cannot be expected to be the engine for GDP growth that it was during the housing boom of the mid-2000s.

#### Commercial Real Estate

The market for commercial real estate has also suffered in the recession. Commercial real estate encompasses a wide range of properties, from small businesses that occupy a single stand-alone structure to large shopping malls owned by a consortium of investors.

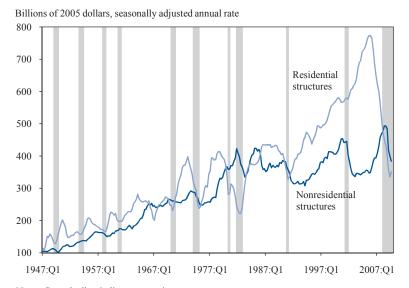
Problems in the commercial real estate sector are less obviously a result of overbuilding than those in the residential sector; instead, they reflect the sharp decline in demand for commercial space and the overall decline in the economy. The value of commercial real estate increased notably between 2005 to 2007, spurred by easy credit conditions, as measured for example in the Senior Loan Officer Opinion Survey. By the end of 2004, the net number of banks reporting they had eased lending standards for commercial real estate loans was persistently larger than at any point in the history of the series. Most banks did not begin tightening standards again until the end of 2006. The relative quantity of financing also increased over this period; the ratio of the change in the value of commercial real estate mortgages to new construction, which should increase when debt financing becomes relatively attractive, reached a 45-year high in 2003 and then continued to climb, peaking at the end of 2005 at more than three times the historical average.<sup>2</sup>

In the nonresidential sector, high prices did not translate into a dramatic increase in new construction (Figure 4-7). Rather, existing owners of nonresidential properties used the cheap financing and price increases to refinance or sell. Several factors appear to have played a role in limiting

<sup>&</sup>lt;sup>2</sup> The numerator of the ratio is the seasonally adjusted change in commercial and multifamily residential mortgages (Federal Reserve, Flow of Funds Tables F219 and F220). The denominator is seasonally adjusted construction of commercial and health care structures, multifamily structures, and miscellaneous other nonresidential structures (Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts Table 5.3.5). The median of the ratio from 1958 to 2000 is 0.46, while the 2005:Q4 value is 1.50.

new investment in this sector. First, a close look at Figure 4-7 shows that nonresidential construction has historically exhibited much less volatility than residential construction, a pattern that also held true during the recent boom. Second, developers seem to have been wary of overbuilding because of unhappy experiences in previous expansions. A final dampening factor has been that construction resources were tied up in the residential construction sector. Indeed, only when residential construction slowed in 2006 did nonresidential construction begin to show larger gains.

Figure 4-7
Fixed Investment in Structures by Type



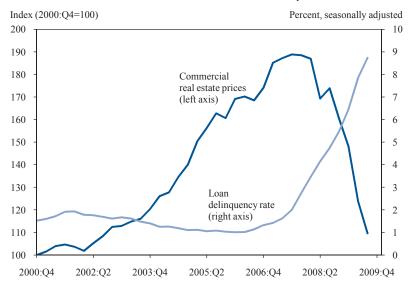
Note: Grey shading indicates recessions.

Source: Department of Commerce (Bureau of Economic Analysis), National Income and

Product Accounts Table 5.3.6.

Commercial real estate values have declined dramatically since 2007. As Figure 4-8 shows, according to the Moody's/REAL Commercial Property Index, which tracks same-property price changes for commercial office, apartment, industrial, and retail buildings, commercial real estate prices fell 43 percent from their peak in October 2007 to September 2009. A steep increase in vacancy rates, stemming from weakness in the overall economy, has been one important reason for these declines in value: the commercial real estate services firm CB Richard Ellis reports that vacancy rates for offices increased from 12.6 percent in mid-2007 to 17.2 percent in the third quarter of 2009. Before the recession, vacancy rates were generally declining.

Figure 4-8 Commercial Real Estate Prices and Loan Delinquencies



Sources: Moody's/Real Estate Analytics LLC, Commercial Property Index; Federal Reserve Board

As commercial real estate values have declined, owners have found it difficult to refinance their debt because loan balances now appear large relative to the properties' value. Nearly half of the banks responding to the Senior Loan Officer Opinion Survey in the third quarter of 2009 reported that they continued to tighten standards on commercial real estate loans, whereas none of the respondents reported having eased standards. Since commercial real estate loans typically are relatively short term, an inability to refinance debt has led to a sharp rise in delinquencies and foreclosures. Figure 4-8 shows that the proportion of commercial real estate loans with payments at least 30 days past due rose from about 1 percent during most of the decade to almost 9 percent by the third quarter of 2009. Distress has made lenders reluctant to provide financing for new projects. Overall, the value of commercial and multifamily residential mortgages declined in each of the first three quarters of 2009 (Federal Reserve Flow of Funds Tables L.219 and L.220). Tight credit and the increase in sales of distressed properties have fed into further price declines, generating a negative feedback loop between property values and conditions in the sector.

As private sources of funding have dried up, the Federal Reserve has helped fill the gap through the Term Asset-Backed Securities Loan Facility (TALF). In June 2009, the TALF made lending available to private financial market participants against their holdings of existing commercial

mortgage-backed securities (CMBS), thereby increasing liquidity in the CMBS market. In November 2009, the TALF made its first loans against newly issued CMBS. The provision of TALF financing for these newly issued securities may prove particularly important in allowing borrowers to refinance.

The negative feedback loop between credit conditions, the sale of distressed commercial properties, and commercial property values may lead to further price declines. Eventually, however, a combination of economic recovery and an improvement in financing conditions should help prices stabilize. Still, as with the residential mortgage market, commercial real estate financing will likely not return any time soon to the easy terms that prevailed before the collapse. Experience in previous business cycles suggests that recovery of the sector will lag the economy as a whole.

#### **BUSINESS INVESTMENT**

If consumption and construction are not the drivers of growth going forward in the way they were in the early 2000s, two components of private demand are left to fill the gap: business investment excluding structures, and net exports.<sup>3</sup> Nonstructures investment could well become again (as it was in the 1990s) a driving force in the expansion of aggregate demand and economic production. And in the long run, its share in GDP could reach levels higher than those of the first part of the decade.

## Investment in the Recovery

Investment spending (other than structures) plummeted in late 2008 and early 2009. This investment spending fell so low that, after accounting for depreciation, estimates of the absolute stock of capital showed stagnation in 2008 and even a decline in the first quarter of 2009. Falling spending in this category reflected falling business confidence, as indicated, for example, in the Federal Reserve Bank of Philadelphia's Business Outlook Diffusion Index; this index was negative every month from October 2008 to July 2009, signaling that more businesses thought conditions were deteriorating than thought they were improving. Similarly, the National Federation of Independent Business Index of Small Business Optimism hit its lowest point since 1980 in March 2009.

<sup>&</sup>lt;sup>3</sup> In the National Income and Product Accounts, construction of commercial structures is classified as part of business investment. Given that the boom and bust were concentrated in residential and commercial construction, however, for discussing recent and prospective developments it is more useful to consider commercial construction investment together with residential investment, as was done in the previous section. Thus, the discussion that follows is largely concerned with nonstructures investment.

Investment of this kind firmed in the second half of 2009, coinciding with improvements in business confidence. Indeed, investment in equipment and software increased at a 13 percent annual rate in the fourth quarter. Nevertheless, the cumulative erosion has been so substantial that years of strong growth will be necessary to fully recover from the nadir. As a result, recovery of spending in this area is likely to make a substantial contribution to the recovery of the overall economy.

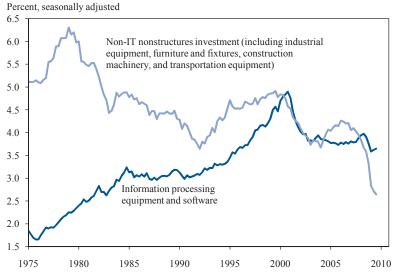
## Investment in the Long Run

In the long run, the share of business investment is likely not just to return to its pre-recession levels, but to exceed them. During the boom of the 1990s, the share of business investment in equipment and software as a fraction of GDP rose from a post-Gulf-War recession low of 6.9 percent in 1991 to 9.6 percent in 2000. During that period, investment in information processing equipment and software made the largest contribution to the increase, as shown in Figure 4-9. Information technology (IT) investment grew an astounding 18 percent per year on average from 1991 to 2000. Other investment in equipment and software, which includes industrial, transportation, and construction equipment, accelerated as well, and grew as a share of GDP over this period. This high level of investment in the 1990s increased industrial capacity by an average of 4 percent per year.

As the figure shows, the boom came to an end at the beginning of the 2000s, when investment in every category of equipment and software fell sharply as a share of GDP. The recovery in business investment in equipment and software after the 2001 recession was weak. IT investment grew at a historically tepid pace of 6 percent per year from 2003 to 2007, far below pre-2000 growth rates. Non-IT investment growth was also muted, with spending on industrial equipment growing at an annual pace of only 3.7 percent from 2003 to 2007, down from an average of 5.4 percent in the 1990s. Investment in transportation equipment surpassed its 1999 peak only for one quarter in 2006. In the recovery following the 2001-02 recession, the peak value of non-IT equipment investment as a share of GDP was only 4.3 percent (in 2006), a level that does not even match the historical average value of that series in the period from 1980 to 2000. Production capacity in the sector grew an average of 0.6 percent per year from 2003 to 2007, substantially below the average pace of growth in the 1990s. Taken as a whole, these figures suggest that business investment may have been abnormally low over the course of the post-2001 expansion.

There are strong reasons to expect investment's role in the economy will be larger in the future. In the long run, the real interest rate will adjust to bring the demand for the economy's output in line with the economy's

Figure 4-9 Nonstructures Investment as a Share of Nominal GDP



Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 5.3.5.

capacity. The increase in private saving described in the first part of the chapter, together with the policies to tackle the long-run budget deficit that are the subject of the next chapter, should help maintain low real interest rates. By keeping the cost of investing low, these low real interest rates should help to encourage investment.

At the same time, other forces should help increase investment at a given cost of borrowing. A number of promising technological developments offer the prospect that businesses will be able to find many productive purposes for new investments, ranging from new uses of wireless electromagnetic spectrum, to new applications of medical and biological discoveries opened up by DNA sequencing technologies, to environmentally friendly technologies like new forms of production and distribution of clean energy (see Chapter 10 for more on these subjects).

Another form of investment is business spending on research and development (R&D). Such spending can be interpreted as investment in the accumulation of "knowledge capital." Ideally, private investments in R&D will dovetail with complementary public investments in knowledge capital through basic research and scientific and technological infrastructure. The Administration's commitment to fostering the connections between public and private investments in knowledge production has been strongly signaled in both the Recovery Act and the President's fiscal year 2010 budget (Office of Management and Budget 2009). The Recovery Act included \$18.3 billion

of direct spending on research, one of the largest direct increases in such spending in the Nation's history. In addition, more than \$80 billion of Recovery Act funds were targeted toward technology and science infrastructure. The Administration's first budget proposed to double the research spending by three key science agencies: the National Science Foundation, the Department of Energy's Office of Science, and the Department of Commerce's National Institute of Standards and Technology. And to foster private sector innovation, the budget also included the full \$74 billion cost of making the research and experimentation tax credit permanent in order to give businesses the certainty they need to invest, innovate, and grow.

With reduced demand from consumption and housing tending to make the real interest rate lower than it otherwise would be, and increased investment demand from the many newly developing technologies and incentives for R&D, a larger portion of the economy's output is likely to be devoted to investment. And, because business investment contributes not only to aggregate demand but also to aggregate supply and productivity, a larger role for investment will create a stronger economy going forward.

#### THE CURRENT ACCOUNT

The picture of future growth in the United States described in the previous sections depends less on borrowing and consumption than did growth in the past decade. This view has important implications for our interactions with other countries and the current account.

## Determinants of the Current Account

The current account is the trade balance plus net income on overseas assets and unilateral transfers like foreign aid and remittances. The trade balance, or net exports, represents the bulk of the current account and is responsible for a large majority of short-run movements in it. To a first approximation, a current account deficit implies that the trade balance is negative or, equivalently, that our exports are less than our imports. At the same time, the current account deficit must also be matched by the net borrowing of the United States from the rest of the world. If we spend more than we earn, we must borrow the money to do so. In the national income accounting sense, the definition of the current account can be reduced to national saving minus investment (plus some measurement error).

This accounting definition provides a description but not an explanation of the drivers of the current account. One important driver is the business cycle. As Box 4-1 explains, over the last 30 years, the U.S. current account deficit tended to be larger when the economy was booming and unemployment was low. In a boom, investment tends to rise and saving tends to fall, generating a current account deficit. When the economy struggles, investment often falls and saving often rises, generating a surplus (or a smaller deficit). In countries that rely more on exports to drive their growth, an acceleration in growth can be associated with a rising current account surplus (or smaller deficit).

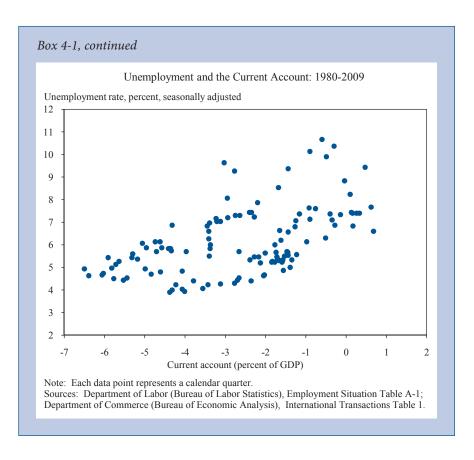
Current accounts do not need to be balanced in every country in every year. At any point in time, countries may offer more investment opportunities than their desired level of saving at a given interest rate can fund, making them net borrowers, resulting in a current account deficit. Other countries may have an excess of saving over desired investment, making them net lenders (a current account surplus). However, in the

#### Box 4-1: Unemployment and the Current Account

The relationship between the level of unemployment and the current account balance is complicated. People frequently argue that imports and specifically the current account deficit—displace U.S. workers and generate higher unemployment. However, the main determinant of unemployment in the short and medium runs is the state of the business cycle. The scatter plot of the current account and the unemployment rate since 1980, shown in the accompanying figure, displays a positive relationship. Historically, a smaller current account deficit has coincided with a higher unemployment rate. Both were being driven by cyclical economic factors: in a recession, the current account balance improved, and unemployment was high. In a boom, the current account balance deteriorated, and unemployment was low. This usual pattern has been at work in the current recession. The U.S. current account deficit narrowed from 6.4 percent of GDP in the third quarter of 2006 to 2.8 percent of GDP in the second quarter of 2009. At the same time, unemployment rose from 4.6 percent to 9.3 percent.

The relationship between unemployment and the current account balance can be different in countries that have relied more heavily on exports for growth. For example, in Germany, the unemployment rate fell from 11.7 percent in 2005 to 9.0 percent in 2007 while the current account surplus rose from 5.1 percent of GDP to 7.9 percent. Likewise, in Japan, unemployment fell from 2005 to 2007 as the current account surplus rose. Given the slack in the U.S. economy, a shift toward a current account surplus could increase aggregate demand and help lower the unemployment rate.

Continued on next page



long run, current accounts should tend toward balance, thereby allowing the net foreign investment position (total foreign assets minus total foreign liabilities) of borrowing nations to at least stabilize as a ratio to GDP and possibly to decline over time. Otherwise, creditor nations would be continually increasing the share of their wealth held as assets of debtor nations, and debtor nations would owe a larger and larger share of their production to foreign lenders and capital owners.

Thus, in the long run, one would expect the U.S. current account to move toward balance. As it does so, it will not cause the absolute level of our accumulated net foreign debt to decline unless the U.S. current account moves into surplus (which is of course possible). But, even if the longrun current account is merely in balance or a small deficit, the previous net foreign borrowing should still decline as a share of GDP as GDP rises. Further, so-called "valuation effects"—changes in asset values of foreign assets held by Americans or U.S. assets owned by foreign investors—also affect the ratio of foreign indebtedness to GDP.

## The Current Account in the Recovery and in the Long Run

As the U.S. economy recovers from the current crisis, it is unlikely to return to current account deficits as large as those in the mid-2000s. Coming out of the 2001–02 recession, investment rose more quickly than saving, and the current account deficit widened to more than 6 percent of GDP (Figure 4-10). Investment had also declined slightly more than saving had before the current crisis hit, and the current account deficit moderated to less than 5 percent of GDP by the third quarter of 2007.<sup>4</sup> The gap narrowed rapidly as investment fell sharply during the crisis. The increase in the personal saving rate since the onset of the crisis has partly offset the large Federal budget deficit (which is negative government saving), so the current account deficit shrank to under 3 percent of GDP.

The specific path of the current account as the economy exits the crisis will depend on whether government and private saving rise ahead of, or along with, a rebound in private investment. But in the long run, the current account deficit is likely to be smaller than it was before the crisis. The likely rise in private and public saving relative to their pre-crisis levels

Percent, seasonally adjusted Percent, seasonally adjusted 25 Gross domestic investment (left axis) -1 20 -2 15 -3 Gross national saving (left axis) 10 -5 Balance on 5 current account (right axis) -6 2006:Q1 2007:Q1 2003:Q1 2004:Q1 2005:Q1 2008:Q1

Figure 4-10 Saving, Investment, and the Current Account as a Percent of GDP

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 5.1.

<sup>&</sup>lt;sup>4</sup> There is also a statistical discrepancy between the saving-minus-investment gap and the current account. While this discrepancy is generally close to zero, it moved from slightly negative to slightly positive in this period, so that the measured current account moved more than the measured gap between saving and investment did.

implies an increase in national saving. Thus, saving is likely to more closely balance domestic investment, suggesting a transition to a smaller current account deficit than in the 2000s. Given that the current account deficit has already narrowed to roughly 3 percent of GDP—less than half its peak—the crucial challenge will be to avoid a reversion to a high-spending, low-saving economy. A successful shift toward a more balanced world growth model generated by increased consumption in nations with current account surpluses could improve net exports even more. This could bring the current account deficit toward its mid-1990s level of roughly 1 to 2 percent of U.S. GDP.

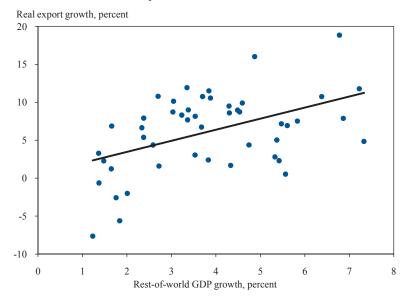
Exports can be expected to rise rapidly as the world economy recovers for a number of reasons. Just as trade typically falls faster than GDP in a recession (discussed in Chapter 3), it typically grows faster during a rebound. Trade-to-GDP ratios have fallen in the last year and can be expected to bounce back as the world economy recovers. This bounce-back alone will lead to rapid export growth. More generally, the crucial driver of exports is always the performance of the world economy. For U.S. goods and services to be bought abroad, demand in other countries must return robustly. This is one reason for the United States to strengthen its ties with fast-growing regions such as emerging East Asia. The faster our trade partners grow and the more we trade with fast-growing economies, the more demand for U.S. exports grows. Figure 4-11 shows the historical relationship between U.S. export growth and growth of non-U.S. world GDP.

The rebalancing of the U.S. economy is likely to be accompanied by a rebalancing of the world economy as well. It is reasonable to expect growth in East Asia to continue at a rapid rate but also to become more oriented toward domestic consumption and investment than it has been in the recent past. Some nations with large current account surpluses took steps to increase domestic demand during the crisis, and these efforts must be maintained and expanded if world growth is to rebalance. It is not a given that such a transition in world demand will take place. Concerted policy action will be needed, but if saving falls in countries with current account surpluses and spending rises, that should stimulate U.S. exports as well as take pressure off of the U.S. consumer as an engine of world growth.

## Steps to Encourage Exports

The Administration is taking many concrete steps to encourage exports. The Trade Promotion Coordinating Committee brings government agencies together to help firms export. While the final decision of whether and how much to export is a market decision made by private businesses, the government can play a constructive role in many ways. The

Figure 4-11
Growth of U.S. Exports and Rest-of-World Income: 1960-2008



Notes: Rest-of-world GDP constructed as world GDP in constant dollars less U.S. GDP. Data are annual growth rates, 1960-2008. Best-fit linear regression equation is: export growth = 0.5 + 1.5 (GDP growth).

Sources: World Bank, World Development Indicators; Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.6.

Export-Import Bank can help with financing; consular offices can provide contacts, information, and advocacy; Commerce Department officials can help firms negotiate hurdles; a combination of agencies can help small and mid-sized businesses explore overseas markets. Much of the academic literature in trade models a firm's decision to export as involving a substantial one-time fixed cost (Melitz 2003). The Administration is doing all that it can to lower that initial fixed cost to help expand exports.

In addition, the Administration is pursuing possible trade agreements and making the most of its current trade agreements to expand opportunities for American firms to export. Because U.S. trade barriers are relatively low, new trade agreements often lower barriers abroad more than in the United States, opening new paths for U.S. exports. As the Administration works to expand U.S. market access through a world trade agreement in the Doha round of multilateral trade talks, it continues to explore its options in bilateral free trade agreements and regional frameworks, such as the Trans-Pacific Partnership. The United States Trade Representative continues to work through previously negotiated trade agreements to lower non-tariff trade barriers and facilitate customs issues to make it easier for U.S. businesses to export.

Not all of these developments will necessarily increase net exports (or the current account) of the United States. Since the current account equals net lending to or borrowing from the world, moving the current account balance requires adjustments in saving and investment as well as more opportunities to export. In the long run, increases in demand for U.S. exports resulting from export promotion or reduced trade barriers will generate higher standards of living, but through improved terms of trade, not an increase in net exports. Further, the simple recovery of world trade volumes will increase exports and imports alike. As discussed in Chapter 10, this increase in trade can increase productivity and living standards, but it will not change the current account. However, rapid world growth and declining current account surpluses abroad should lead to an increase in U.S. exports. This can help increase U.S. net exports and hence contribute to the recovery.

As with higher investment, lower current account deficits have important long-run benefits. Lower foreign indebtedness than the country otherwise would have had means reduced interest payments to foreigners. Equivalently, it means that foreigners have on net smaller claims on the output produced in the United States. Thus, lower current account deficits will raise standards of living in the long run.

#### Conclusion

Economic policy should not aim to return the economy to the path of unstable, unsustainable, unhealthy growth it was on before the wrenching events of the past two years. We should—and can—achieve something better. Growth that is not fueled by unsustainable borrowing, and growth that is based on productive investments, is more stable than the growth of recent decades. And growth that is associated with higher saving will lead to greater accumulation of wealth, and so greater growth in our standards of living.



#### CHAPTER 5

## ADDRESSING THE LONG-RUN FISCAL CHALLENGE

After several years of budget surpluses, the Federal Government began running consistent, substantial deficits in the 2002 fiscal year. Because the deficits absorbed a significant portion of private saving, they were one reason that the economic expansion of the 2000s was led by consumption and foreign borrowing rather than investment and net exports. More troubling than the deficits of the recent past, however, is the long-term fiscal outlook the Administration inherited. Even before the increased spending necessary to rescue and stabilize the economy, the policy choices of the previous eight years and projected increases in spending on health care and Social Security had already put the government on a path of rising deficits and debt. Thus, a key step in rebalancing the economy and restoring its long-run health must be putting fiscal policy on a sound, sustainable footing.

This chapter discusses the fiscal challenges the Administration inherited, the dangers posed by large and growing deficits, and the Administration's measures and plans for addressing these challenges. The Administration and Congress are already taking important steps, most notably through their efforts toward comprehensive health care reform. The legislation currently under consideration addresses rapidly rising health care costs, which are one of the central drivers of the long-run fiscal problem. The fiscal problem is multifaceted, however, and was decades in the making. As a result, no single step can fully address it. Much work remains, and bipartisan cooperation will be essential.

#### THE LONG-RUN FISCAL CHALLENGE

When President Obama took office in January 2009, fiscal policy was on a deteriorating course. Figure 5-1 shows the grim outlook for the budget projected by the Congressional Budget Office (CBO) under the assumption

that the policies then in effect would be continued.<sup>1</sup> As the figure makes clear, the budget was on an unsustainable trajectory.

Percent of GDP

5

Actual Projected

0

-5

-10

-15

-20

1990 2000 2010 2020 2030 2040

Figure 5-1
Actual and Projected Budget Surpluses in January 2009 under Previous Policy

Note: CBO baseline surplus projection adjusted for CBO's estimates of costs of continued war spending, continuation of the 2001 and 2003 tax cuts, avoiding scheduled cuts in Medicare's physician payment rates, and holding other discretionary outlays constant as a share of GDP.

Sources: Congressional Budget Office (2009a, 2009f).

The figure shows that CBO projected that the deficit would be severely affected in the short run by the economic crisis. The decline in output was projected to send tax revenues plummeting and spending for unemployment insurance, nutritional assistance, and other safety net programs soaring. As a result, the deficit was projected to spike to 9 percent of gross domestic product (GDP) in 2009 before falling as the economy recovered. It is natural for revenues to decline and government spending to rise during a recession. Indeed, these movements both mitigate the recession and cushion its impact on ordinary Americans.

<sup>&</sup>lt;sup>1</sup> This figure presents the CBO January 2009 baseline budget outlook through 2019, adjusted to reflect CBO's estimates of the cost of extending expiring tax provisions including the 2001 and 2003 tax cuts and indexing the Alternative Minimum Tax (AMT) for inflation, reducing the number of troops in Iraq and Afghanistan to 75,000 by 2013, modifying Medicare's "sustainable growth rate" formula to avoid scheduled cuts in physician payment rates, holding other discretionary outlays constant as a share of gross domestic product, and the added interest costs resulting from these adjustments (Congressional Budget Office 2009a). After 2019, the figure presents CBO's June 2009 *Long-Term Budget Outlook* alternative fiscal scenario, which also reflects the costs of continuing these policies (Congressional Budget Office 2009f).

The key message of the figure, however, concerns the path of the deficit after the economy's projected recovery from the recession. The deficit was projected to fall to close to 4 percent of GDP in 2012 as the economy recovers, but then to reverse course, rising steadily by about 1 percent of GDP every two years. Figure 5-2 shows that if that path were followed, the ratio of the government's debt to GDP would surpass its level at the end of World War II within 20 years, and would continue growing rapidly thereafter. At some point along such a path, investors would no longer be willing to hold the government's debt at any reasonable interest rate. Thus, such a path is not feasible indefinitely.

Percent of GDP 250 Projected Actual 200 150 100 50 2000 1920 1940 1960 1980 2020 2040

Figure 5-2 Actual and Projected Government Debt Held by the Public under Previous Policy

Note: CBO baseline projection adjusted for CBO's estimates of costs of continued war spending, continuation of the 2001 and 2003 tax cuts, avoiding scheduled cuts in Medicare's physician payment rates, and holding other discretionary outlays constant as a share of GDP. Sources: Congressional Budget Office (2009a, 2009f).

## Sources of the Long-Run Fiscal Challenge

The challenging long-run budget outlook the Administration inherited has two primary causes: the policy choices of the previous eight years and projected rising spending on Medicare, Medicaid, and Social Security. The policy choices under the previous administration contribute a substantial amount to the high projected deficits as a share of GDP, while rising spending for health care and Social Security is the main reason the deficits are projected to balloon over time. Both make large contributions to the difficult fiscal outlook.

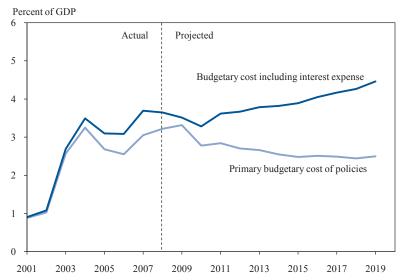
The previous policy choices involved both spending and revenues. On the spending side, two decisions were particularly important. One was the failure to pay for the addition of a prescription drug benefit to Medicare, which is estimated to increase annual deficits over the next decade by an average of one-third of a percent of GDP, excluding interest, and more than that in the years thereafter (Congressional Budget Office 2009g; Council of Economic Advisers estimates). The other was the decision to fight two wars without taking any steps to pay for the costs—costs that so far have come close to \$1 trillion. On the revenue side, the most important decisions were those that lowered taxes without making offsetting spending cuts. In particular, the 2001 and 2003 tax cuts have helped push revenues to their lowest level as a fraction of GDP at any point since 1950 (Office of Management and Budget 2010).

Figure 5-3 shows the impact on the budget deficit of these three major policies of the previous eight years that were not paid for: the 2001 and 2003 tax cuts (including the increased cost of Alternative Minimum Tax relief as a result of those tax cuts), the prescription drug benefit, and the spending for the wars in Iraq and Afghanistan (which for this analysis are assumed to wind down by 2013), both with and without the interest expense of financing these policies.<sup>2</sup> At their peak in 2007 and 2008, these policies worsened the government's fiscal position by almost 4 percent of GDP, and their effect, including interest, rises above 4 percent of GDP into the indefinite future. The fiscal outlook would be far better if these policies had been paid for. Indeed, Auerbach and Gale (2009) conclude that roughly half of the long-run fiscal shortfall in the outlook described earlier results from policy decisions made from 2001 to 2008.

The other main source of the long-run fiscal challenge is rising spending on Medicare, Medicaid, and Social Security. These burdens stem primarily from the rapid escalation of health care costs, combined with the aging of the population. Annual age-adjusted health care costs per Medicare enrollee grew 2.3 percentage points faster than the increase in per capita GDP from 1975 to 2007. If this rate of increase were to continue, Federal spending on Medicare and Medicaid alone would approach 40 percent of the Nation's income in 2085, which is clearly not sustainable

<sup>&</sup>lt;sup>2</sup> The figure shows the annual cost (as a percent of GDP) of supplemental military expenditures for operations in Iraq and Afghanistan through 2009 and CBO's estimate of the cost of reducing the number of troops in Iraq and Afghanistan to 75,000 by 2013 thereafter; the cost of the Medicare Part D program net of offsetting receipts and Medicaid savings; the cost of the 2001 and 2003 tax cuts plus the additional cost of AMT relief associated with those tax cuts, as estimated by CBO; and the interest expense of financing these policies.

Figure 5-3 Budgetary Cost of Previous Administration Policy



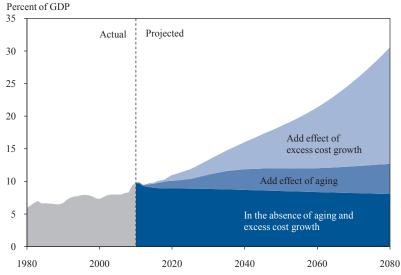
Note: Includes supplemental war spending, cost of 2001 and 2003 tax cuts, Medicare Part D net of offsetting receipts and Medicaid savings, and related interest expense. Sources: Belasco (2009); Congressional Budget Office (2009a, 2009g); CEA estimates.

(Congressional Budget Office 2009f). In addition, as a result of decreases in fertility and increases in longevity, the ratio of Social Security and Medicare beneficiaries to workers is rising, straining the financing of these programs.

Figure 5-4 projects the growth in spending in Medicare, Medicaid, and Social Security. Spending on the programs is projected to double as a share of GDP by 2050. Over the next 20 years, demographics—the retirement of the baby boom generation—is the larger cause of rising spending. But throughout, rising health care costs contribute to rising spending, and over the long term, they are by far the larger contributor to the deficit.

Other important factors have also contributed to the increase in entitlement spending. For example, the fraction of non-elderly adults receiving Social Security Disability Insurance (SSDI) benefits has approximately doubled since the mid-1980s, and the fraction of Social Security spending accounted for by SSDI benefits has increased from 10 to 17 percent. Beneficiaries of SSDI are also eligible for health insurance through Medicare. Total cash benefits paid to SSDI recipients were \$106 billion in 2008 and an additional \$63 billion was spent on their health care through Medicare. One contributor to the increase in disability enrollment was a 1984 change in the program's medical eligibility criteria, which allowed more applicants to qualify for benefits in subsequent years (Autor and Duggan 2006).

Figure 5-4
Causes of Rising Spending on Medicare, Medicaid, and Social Security



Source: Office of Management and Budget (2010).

The potential challenges to the budget from these three entitlement programs have been clear for decades. Yet, policymakers in previous administrations did little to address them. For example, in October 2000, CBO warned that spending on Medicare, Medicaid, and Social Security would more than double, rising from 7.5 percent of GDP in 1999 to over 16.7 percent in 2040; nine years later, their forecast for spending on these programs remains virtually unchanged (Congressional Budget Office 2000, 2009f).

All told, the Obama Administration inherited a very different budget outlook from the one left to the previous administration. Figure 5-5 compares the budget forecast in January 2001 (Congressional Budget Office 2001) with the budget outlook in January 2009 described above.<sup>3</sup> In 2001, CBO forecast a relatively bright fiscal future. After a decade of strong growth and responsible fiscal policy, the budget was substantially in surplus, and CBO analysts projected rising surpluses over the next decade, even under their more pessimistic policy alternatives. Rising health care costs would squeeze the budget only over the long term, and the retirement of the baby boom generation was still more than a decade away. The intervening time could have been used to pay off the national debt and accumulate

<sup>&</sup>lt;sup>3</sup> The 2001 forecast includes the January 2001 baseline forecast adjusted to reflect CBO's estimated cost of holding nondiscretionary outlays constant as a share of nominal GDP. Starting in 2012, the deficit evolves according to the intermediate projection in the October 2000 *Long-Term Budget Outlook* (Congressional Budget Office 2000).

substantial assets in preparation. But policymakers chose a different path. They enacted policies that added trillions to the national debt and doubled the size of the long-run problem. Combined with a deteriorating economic forecast and technical reestimates, the result was a much worse budget outlook in January 2009 than in January 2001.

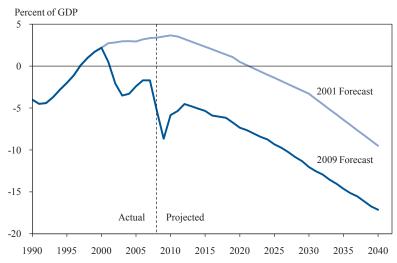


Figure 5-5 Budget Comparison: January 2001 and January 2009

Note: CBO 2001 baseline projection adjusted for the cost of holding nondiscretionary outlays constant as a share of nominal GDP; CBO 2009 baseline projection adjusted for costs of continued war spending, continuation of 2001 and 2003 tax cuts, avoiding scheduled cuts in Medicare's physician payment rates, and holding nondiscretionary outlays constant as a share of nominal GDP.

Sources: Congressional Budget Office (2000, 2001, 2009a, 2009f).

### The Role of the Recovery Act and Other Rescue Operations

One development that has had an important effect on the shortterm budget outlook since January 2009 is the aggressive action the Administration and Congress have taken to combat the recession. By far the most important component of the response in terms of the budget is the American Recovery and Reinvestment Act of 2009. The Recovery Act cuts taxes and increases spending by about 2 percent of GDP in calendar year 2009 and by 21/4 percent of GDP in 2010.

Crucially, however, the budgetary impact of the Recovery Act will fade rapidly. As a result, it is at most a very small part of the long-run fiscal shortfall. By 2012, the tax cuts and spending under the Recovery Act will be less than one-third of 1 percent of GDP. Other rescue measures, such as extensions of programs providing additional support to those most directly affected by the recession, also contribute to the deficit in the short run. But these programs are much smaller than the Recovery Act. And like the Recovery Act, their budgetary impact will fade quickly.

Figure 5-6 shows the overall budgetary impact of the Recovery Act and other rescue measures, including interest on the additional debt from the higher short-run deficits resulting from the measures. The impact is substantial in 2009 and 2010 but then fades rapidly to about one-quarter of 1 percent of GDP. Moreover, because these estimates do not include the effects of the rescue measures in mitigating the downturn and speeding recovery—and thus raising incomes and tax revenues—they surely overstate the measures' impact on the budget outlook.

Percent of GDP 2.5 2.0 1 5 1.0 0.5 0.0 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Figure 5-6 Effect of the Recovery Act on the Deficit

#### AN ANCHOR FOR FISCAL POLICY

Source: Congressional Budget Office (2009b).

The trajectory for fiscal policy that the Administration inherited, with budget deficits and government debt growing relative to the size of the economy, is clearly untenable. Change is essential. But there are many alternatives to the trajectory the Administration inherited. In thinking about what path fiscal policy should attempt to follow, it is therefore important to examine how deficits affect the economy and what policy paths are feasible.

### The Effects of Budget Deficits

Two factors are critical in shaping the economic effects of budget deficits: the state of the economy, and the size and duration of the deficits. Consider first the state of the economy. A central lesson of macroeconomics is that in an economy operating below capacity, higher deficits raise output and employment. Transfer payments (such as unemployment benefits) and tax cuts encourage private consumption and investment spending. Government investments and other purchases contribute to higher output and employment directly and, by raising incomes, also encourage further private spending.

In the current situation, as discussed in Chapter 2, monetary policymakers are constrained because nominal interest rates cannot be lowered below zero, and so they are unlikely to raise interest rates quickly in response to fiscal expansion. As a result, the fiscal expansion attributable to the Recovery Act is likely to increase private investment as well as private consumption and government purchases. Finally, in a precarious environment like the one of the past year, expansionary fiscal policy may make the difference between an economy spiraling into depression and one embarking on a self-sustaining recovery, and so have a dramatic impact on outcomes. As described more fully in Chapter 2, these benefits of fiscal expansion were precisely the motivation for the Administration's pursuit of the Recovery Act and other stimulus policies over the past year.

When the economy is operating at normal capacity, the effects of higher budget deficits are very different. In such a setting, the stimulus from deficits leads not to higher output, but only (perhaps after a delay) to a change in the composition of output. To finance its deficits, the government must borrow money, competing against businesses and individuals seeking to finance new productive investments. As a result, deficits drive up interest rates, discouraging private investment. Hence, deficit spending diverts resources that would otherwise be invested in productive private capital—new business investments in plant, equipment, machinery, and software, or investments in human capital through education and training into government purchases or private consumption. To the extent that the private investments nonetheless occur but are financed by borrowing from abroad, the country has the benefit of the capital, but at the cost of increased foreign indebtedness. The result is that Americans' claims on future output are lower.

In sum, in normal times, higher budget deficits impede the rebalancing of output toward investment and net exports described in Chapter 4; lower deficits contribute to that rebalancing. In addition, budget deficits were one source of the "global imbalances" discussed in Chapter 3 that have been implicated by some analysts as part of the cause of the financial and economic crisis. Finally, higher budget deficits and the higher levels of debt they imply may reduce policymakers' ability to turn to expansionary fiscal policy in the event of a crisis.

Although determining the impact of large budget deficits on capital formation and interest rates is a difficult and contentious issue, the bulk of the evidence points to important effects. For example, several studies find that increases in projected deficits raise interest rates (Wachtel and Young 1987; Engen and Hubbard 2005; Laubach 2009). A careful review concludes that the weight of the evidence indicates that budget deficits raise interest rates moderately (Gale and Orszag 2003). Examining the international evidence, another study reaches a similar conclusion (Ardagna, Caselli, and Lane 2007).

The economic impact of budget deficits depends not only on the condition of the economy but also on their magnitude and persistence. A moderate period of large deficits in a weak economy will speed recovery in the short run and leave the government with only modestly higher debt in the long run. Even in an economy operating at capacity, a temporary period of high deficits is manageable, as the experience of World War II shows compellingly. Once full employment was reached, the high wartime spending surely crowded out investment and thus caused standards of living after the war to be lower than they otherwise would have been. But that cost aside, the enormous temporary deficits that reached 30 percent of GDP at the peak of the war created no long-run problems.

In contrast, the effects of large deficits and debt that grow indefinitely and without bound relative to the size of the economy are very different—and potentially very dangerous. If a government tried to follow such a path, eventually its debt would exceed the amount investors were willing to hold at a reasonable interest rate. At that point, the situation would spiral out of control. Rising interest costs would worsen the fiscal situation; this would further reduce investors' willingness to hold the government's debt, raising interest costs further; and so on. Eventually, investors would be unwilling to hold the debt at any interest rate.

## Feasible Long-Run Fiscal Policies

Investors have no qualms about holding some government debt. Indeed, many desire the safety of such an investment. And crucially, in an economy in which private incomes and wealth, as well as the government's tax base, are growing, the amount of debt investors are willing to hold also

grows. Thus, the key to a sustainable deficit path is a fiscal policy that keeps the level of debt relative to the scale of the economy at levels where investors are willing to hold that debt at a reasonable interest rate. Most obviously, paths where the ratio of the deficit to GDP and the ratio of the debt to GDP grow without bound cannot be sustained. Equally, however, paths that would lead the debt-to-GDP ratio to stabilize, but at an extremely high level, are also not feasible.

Historical and international comparisons, as well as the very favorable terms on which investors are currently willing to lend to the United States, show that the Nation is not close to such problematic levels of indebtedness. In 2007, before the recession, the debt held by the public was 37 percent of nominal GDP. In 2015, because of the direct effects of the recession and, to a lesser extent, the fiscal stimulus, the President's budget projects the public debt (net of financial assets held by the government) will be 65 percent of GDP. By comparison, it was 113 percent of GDP at the end of World War II; in the United Kingdom, the ratio at the end of World War II was over 250 percent. Table 5-1 shows the projected 2010 government debt-to-GDP ratio (including state and local government debt) for a wide range of developed countries. Japan's debt-to-GDP ratio is 105 percent, Italy's is 101 percent, and Belgium's is 85 percent, and all of these are projected to rise. None of these countries enjoys the same depth and breadth of demand for its debt as the United States does, yet none has difficulty financing its debt. Thus, although it is hard to know the exact U.S. debt-to-GDP ratio that would begin to pose problems, it is clearly well above current levels.

Table 5-1 Government Debt-to-GDP Ratio in Selected OECD Countries (percent)

development part to del runto in concetto della committee (percent)				
	2010			
Belgium	85.4			
Canada	32.6			
France	60.7			
Germany	54.7			
Italy	100.8			
Japan	104.6			
Spain	41.6			
Sweden	-13.1			
United Kingdom	59.0			
United States	65.2			
Euro-area average	57.9			
OECD average	57.6			

Note: Numbers include state and local as well as Federal net government debt. Source: Organisation for Economic Co-operation and Development (2009).

### The Choice of a Fiscal Anchor

It is essential that the United States follow a fiscal policy that stabilizes the debt-to-GDP ratio at a feasible level. In thinking about the specific level of that ratio that policymakers should aim for, it is useful to think about the implications that different levels of the budget deficit have for the level of government debt in the long run. In particular, consider paths where the deficit as a percent of GDP stabilizes at some level. If the deficit-to-GDP ratio and the growth rate of nominal GDP are both steady, the debt-to-GDP ratio will settle down to the ratio of the deficit-to-GDP ratio to the growth rate of nominal GDP.4 For example, if the deficit is 1 percent of GDP and nominal GDP is growing at 5 percent per year, the debt-to-GDP ratio will stabilize at 20 percent. Similarly, if the deficit-to-GDP ratio and the growth rate of nominal GDP are both 4 percent, the debt-to-GDP ratio will stabilize at 100 percent. Instead of thinking about various possible longrun targets for the debt-to-GDP ratio, policymakers can consider possible targets for the deficit-to-GDP ratio and their accompanying implications for the long-run debt-to-GDP ratio.

The choice among different deficit-to-GDP ratios involves tradeoffs. Lower deficits, and thus lower debt in the long run, have obvious advantages: a higher capital stock, lower foreign indebtedness, smaller global imbalances, and more fiscal room to maneuver. But lower deficits have disadvantages as well. They require smaller government programs, higher taxes, or both. Because Medicare, Medicaid, and Social Security will grow faster than GDP in coming decades even after the best efforts to make those programs as efficient as possible, significant cuts in government spending would impose substantial costs. And higher taxes can reduce incentives to work, save, and invest.

Based on these considerations, the Administration believes that an appropriate medium-run goal is to balance the primary budget—the budget excluding interest payments on the debt. Including interest payments, this target will result in total deficits of approximately 3 percent of GDP. With real GDP growth of about 2.5 percent per year and inflation of about

<sup>&</sup>lt;sup>4</sup> To see this, consider the case where the deficit-to-GDP ratio equals the growth rate of GDP. Then the dollar amount of debt issued in a year (that is, the deficit) equals the dollar increase in GDP. If the debt-to-GDP ratio is 100 percent—the amount of debt outstanding equals GDP—then the percent increase in debt exactly equals the percent increase in GDP, and the debt-to-GDP ratio holds steady at 100 percent. If, however, the amount of debt outstanding is less than nominal GDP, then adding a dollar to the debt results in a larger percentage increase in the debt than does a dollar added to GDP. Hence, the debt-to-GDP ratio will rise. If the amount of debt outstanding is more than nominal GDP, then the percent increase in debt is smaller than the percent increase in GDP and the debt-to-GDP ratio falls. Thus, the debt-to-GDP ratio converges to the ratio of the deficit-to-GDP ratio to the growth rate of GDP, which in this case is 100 percent.

2 percent per year, nominal GDP growth will be about 4.5 percent per year in the long run. Thus a target for the total deficit-to-GDP ratio of 3 percent implies that the debt-to-GDP ratio will stabilize at less than 70 percent. Because the debt-to-GDP ratio is projected to rise to about 65 percent in a few years, such a target implies that the debt-to-GDP ratio will change little once the economy has recovered from the current recession. A debt-to-GDP ratio of around two-thirds is comfortably within the range of historical and international experience. It represents substantial fiscal discipline relative to the trajectory the Administration inherited. Stabilizing the ratio rather than continuing on a path where it is continually growing is imperative, and stabilizing it at around its post-crisis level has considerable benefits and is a natural focal point.

### REACHING THE FISCAL TARGET

Bringing the primary budget into balance and keeping it there will not be easy. Noninterest spending outstrips tax revenues by a large margin in the budget inherited by the Administration. More importantly, the trajectory of policy implied that spending would continue to exceed revenues even after the economy had recovered and that the deficit would rise steadily for decades to come. The economic developments and policy decisions that put fiscal policy on that course took place over many years. Thus, moving policy back onto a sound path will not happen all at once.

### General Principles

In broad terms, the right way to tackle the long-run fiscal problem is not through a sharp, immediate fiscal contraction, but through policies that steadily address the underlying drivers of deficits over time. Large spending cuts or tax increases are exactly the wrong medicine for an economy with high unemployment and considerable unused capacity: just as fiscal stimulus raises income and employment in such an environment, mistimed attempts at fiscal discipline have the opposite effects. Any short-run fiscal contraction can best be tolerated at a time when the Federal Reserve is no longer constrained by the zero bound on nominal interest rates, and so has the tools to counteract any contractionary macroeconomic impacts.

The dangers of a large immediate contraction are powerfully illustrated by America's experience in the Great Depression. In 1937, after four years of very rapid growth but with the economy still far from fully recovered, both fiscal and monetary policy turned sharply contractionary: the veterans' bonus program of the previous year was discontinued, Social Security taxes were collected for the first time, and the Federal Reserve doubled reserve requirements. The consequences of this premature policy tightening were devastating: real GDP fell by 3 percent in 1938, unemployment spiked from 14 percent to 19 percent, and the strong recovery was cut short.

The impact of actions taken today to gradually bring the long-run sources of the deficit problem under control would be very different. Such policies do not involve a sharp short-run contraction that could derail a nascent recovery. Because the effects cumulate over time, however, they can have a large effect on the long-term fiscal outlook.

Policies that provide gradual but permanent and growing deficit reduction have another potential advantage. By improving the outlook for the long-term performance of the economy, they can improve business and consumer confidence today. As a result, deficit-improving policies whose effects are felt mainly in the future can actually boost the economy in the short run. There is considerable evidence that such "expansionary fiscal contractions" are not just a theoretical possibility (see, for example, Giavazzi and Pagano 1990; Alesina and Perotti 1997; Romer and Romer forthcoming).

In keeping with these general considerations, the Administration is taking actions in three important areas that will have a material impact on the deficit in the medium and long terms.

### Comprehensive Health Care Reform

The first and single most important step toward improving the country's long-run fiscal prospects is the enactment of comprehensive health care reform that will slow the growth rate of costs. Beyond the obvious importance for Americans' well-being and economic security, the health reform legislation being considered by Congress would save money. The rapid growth of health care costs is a central source of the country's fiscal difficulties. CBO has estimated that both the bill passed by the House in November 2009 and the bill passed by the Senate in December 2009 would significantly reduce the deficit over the next decade (Congressional Budget Office 2009e, 2009d). But the more important factor for the long-run fiscal situation is that, as discussed in more detail in Chapter 7, the bills contain crucial measures that experts believe will lead to lower growth in costs while expanding access to coverage, increasing affordability, and improving quality. Given the central role of rising health costs in the long-run deficit projections, these measures would therefore lead to substantial improvements in the budget situation over time.

In November 2009, CBO's analysis of the Senate health care bill found that "Medicare spending under the bill would increase at an average annual

rate of roughly 6 percent during the next two decades—well below the roughly 8 percent annual growth rate of the past two decades" (Congressional Budget Office 2009c). In December, the Council of Economic Advisers estimated that the fundamental health care reform in the Senate bill would reduce the annual growth rate of Medicare and Medicaid costs by a full percentage point below what it would otherwise be in the coming decade, and by even more in the following decade (Council of Economic Advisers 2009b). These reductions reflect specific measures directed at identifiable sources of wasteful spending and fraud combined with institutional reforms that will help counter the forces leading to excessive cost growth.

Such a reduction in the growth rate of health care costs would have a more profound effect on the long-run fiscal situation of the country than virtually any other fiscal decision being contemplated today. Even if the slowdown in cost growth held steady at 1 percentage point annually rather than rising in the second decade, it would reduce the budget deficit in 2030 by about 2 percent of GDP relative to what it otherwise would be. In today's terms, this is equivalent to almost \$300 billion per year. Most of these savings reflect the direct impact of lower health care costs on Federal spending. To the extent that health care reform also slows the growth of private sector health insurance costs, which are tax preferred, employees in the private sector will benefit from higher wages and the Treasury from increased revenues; this becomes a second source of budget savings. And these direct savings are magnified by lower interest costs resulting from the reduced debt accumulation in the years preceding 2030 (Council of Economic Advisers 2009a). The need to expand coverage would reduce the overall impact of health care reform on the budget deficit somewhat. However, these costs of expansion would be more than offset even within the coming decade. Thereafter, reform will lower the deficit by increasing amounts over time.

# Restoring Balance to the Tax Code

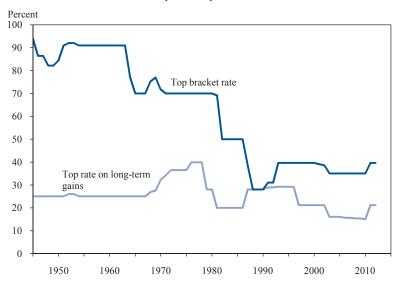
The second major step the Administration is taking to address the long-run fiscal challenge is restoring balance to the tax code that has been lost since 2001. The 2001 and 2003 tax cuts disproportionately favored wealthy taxpayers. According to estimates from the Urban-Brookings Tax Policy Center (2010), in 2010 the 2001 and 2003 tax cuts will increase the after-tax income of the poorest 20 percent of the population by 0.5 percent (about \$51), the middle 20 percent by 2.6 percent (\$1,023), and the top 1 percent by 6.7 percent (\$72,910). About 67 percent of the tax cuts went to the top 20 percent of taxpayers, and 26 percent to the top 1 percent.

These tax cuts for the wealthiest Americans took place when the incomes of ordinary Americans were stagnating and inequality was reaching almost unprecedented levels. In other words, the tax cuts exacerbated the broader trend rather than mitigated it.

The President has consistently maintained that the tax cuts went too far in cutting taxes for people making more than \$250,000 per year and that the country could not afford the tax breaks given to that group over the past eight years. That is why one important plank of his fiscal responsibility framework is to rebalance the tax code, so that it is similar to what existed in the late 1990s for those making more than \$250,000 per year. Specifically, the Administration has proposed letting the marginal tax rates on ordinary income and capital gains for people making more than \$250,000 per year return to the levels they were in 2000. It has also proposed setting the tax rate on dividends for high-income taxpayers to the same 20 percent rate that would apply to capital gains—which is lower than the rate in the 1990s—and letting all other features of the 2001 and 2003 tax cuts expire for these taxpayers. In addition, it has proposed limiting the rate of deductions for high-income taxpayers to 28 percent, so that the wealthy do not obtain proportionately larger benefits from their deductions than other Americans do. None of these changes would take effect until 2011, so they would not affect disposable incomes as the economy recovers in 2010. Nonetheless, they would raise nearly \$1 trillion over the next 10 years and even more over the longer run. Equivalently, they would reduce the budget deficit by more than 0.5 percent of GDP in the medium run and somewhat more over time.

As just discussed, most of these changes would merely bring the tax rates on high-income taxpayers back to their levels in the 1990s. To the extent that some go further, on balance they are more than offset by the fact that some common types of income—dividends, for example—will have rates significantly lower than in the 1990s. Looking at tax policy over U.S. postwar history more broadly shows even more clearly how moderate the proposed changes are. Figure 5-7 shows the top marginal tax rates on ordinary income and capital gains over time and their levels under the Administration's proposals. For ordinary income, a top rate of 39.6 percent, while higher than in the past eight years, is not high compared with the rates that prevailed during most of the past several decades and even during most of the Reagan administration. For capital gains, the 20 percent rate is lower than in many previous periods and is certainly not unusual. And for dividends, the 20 percent rate proposed by the Administration would be lower than under any other modern president save the last.

Figure 5-7
Top Statutory Tax Rates



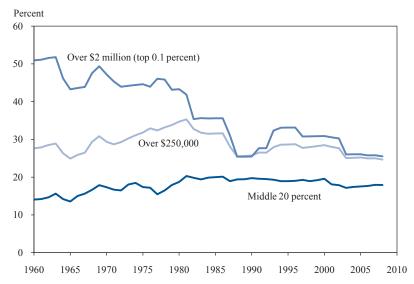
Note: The top rate on qualified dividends is equal to the top bracket rate until 2003; thereafter, it is equal to the top rate on long-term capital gains.

Source: Department of the Treasury, Internal Revenue Service (2009); Department of the Treasury, Office of Tax Analysis (2010).

Statutory marginal tax rates, however, provide only a partial picture of how the progressivity of the tax system has changed over time. The number of tax brackets has declined and the thresholds at which statutory bracket rates apply have changed; different sources of income, such as capital gains and dividends, are now treated differently in the tax code and taxed at lower rates; and exemption amounts and standard deductions have been adjusted. Moreover, the distribution of income across taxpayers and the composition of taxpayers' sources of income have changed significantly over time, making it difficult to disentangle the effects of statutory changes in the tax system from economic changes. To illustrate the impact of historical statutory tax changes in isolation, Figure 5-8 applies the tax rates for each year from 1960 to 2008 to a sample of taxpayers who filed returns in 2005, after adjusting for average wage growth.<sup>5</sup> The purpose is to show both how current taxpayers

<sup>&</sup>lt;sup>5</sup> Average tax rates are calculated for nondependent, nonseparated filers with positive adjusted gross income in tax year 2005. Dollar figures are adjusted to the appropriate tax year using the Social Security Administration national average wage index (Social Security Administration 2009), and the tax due is estimated using the National Bureau of Economic Research's TAXSIM tax model. This tax model incorporates the major tax provisions affecting the vast majority of taxpayers and taxable income, and provides estimates of tax liabilities that closely match the historical distribution of taxes actually paid. However, the tax calculation ignores certain small tax provisions and certain accounting changes that broadened the definition of taxable income over time.

Figure 5-8 Evolution of Average Tax Rates



Notes: Average tax rates calculated each year for a sample of 2005 taxpayers after adjusting for average wage growth. Dollar figures in 2009 dollars.

Sources: Department of the Treasury, Internal Revenue Service, Statistics of Income Public Use File 2005; National Bureau of Economic Research TAXSIM (Feenburg and Coutts 1993); CEA calculations.

would have fared under the tax rates that applied historically and how the tax rates that applied to different income groups have changed over time.

This analysis suggests that the effective tax rates that applied to high-income taxpayers reached their lowest levels in at least half a century in 2008. Under the tax laws that applied from 1960 to the mid-1980s, today's taxpayers earning more than \$250,000 would have paid an average of around 30 percent of their income in Federal income and payroll taxes, with modest variations from year to year. Moreover, while the tax rates that applied to these "ordinary" rich have fallen considerably, tax rates for the very rich have declined much more. Figure 5-8 shows that taxpayers whose real incomes put them in the top 0.1 percent of taxpayers today—the one-in-a-thousand taxpayers with incomes above about \$2 million in 2009 dollars—would have paid more than 50 percent of their incomes in taxes in the early 1960s.

Average tax rates on high-income groups fell precipitously in the mid-1980s, with the sharp decline in statutory marginal rates. At the same time, the tax rates that would have applied to today's middle-income taxpayers (the middle 20 percent of taxpayers in 2005, those making between about \$29,500 and \$49,500 per year) increased, on balance, over the last half century. The result is a compression in the tax burdens applied to taxpayers

with different incomes—the difference between the average tax rates on high-income groups and those on middle-class households is narrower than at any other time in modern history. All told, because of legislative changes in the tax code, the after-tax income of the very-high-income group—their disposable income and purchasing power—is more than 50 percent higher than it would have been under historical tax rates and brackets, while that of the middle class is slightly lower.

Under the Administration's proposals, tax rates on taxpayers earning more than \$250,000 would be very close to the levels that prevailed in the 1990s, leaving statutory tax rates on higher-income taxpayers far below the levels that prevailed until the mid-1980s. The rebalancing of the tax code would not affect middle-class taxpayers—except, of course, to the extent that a better fiscal picture enhances medium- and long-term prospects for economic growth.

The need to restore balance is also evident in our corporate tax system, which encourages businesses to move jobs overseas and to transfer profits to tax havens abroad in order to avoid taxes at home. The Administration's plan to reform international tax laws would reduce these incentives.

Balance also requires that the largest and most highly levered financial firms reimburse taxpayers for the extraordinary assistance provided to them through the Troubled Asset Relief Program. The President has proposed a modest Financial Crisis Responsibility Fee to ensure that the cost of the financial rescue is not borne by taxpayers. Moreover, the fee would provide a deterrent against the excessive leverage that helped contribute to the crisis.

# Eliminating Wasteful Spending

The third step the Administration is taking to confront the long-term deficit is cutting unnecessary spending. The President pledged to eliminate programs that are not working. Last year, the Administration either proposed or enacted cuts to 121 specific programs; these proposed cuts totaled \$17 billion in the first year and hundreds of billions of dollars over the 10-year budget window. They include billions of dollars in terminations of defense programs such as the F-22 fighter aircraft and the new Presidential helicopter, cuts in subsidies for large, high-income agribusinesses, and more than \$40 billion in savings over the next 10 years from eliminating unnecessary subsidies to financial institutions in the private student loan market.

In its fiscal 2011 budget, the Administration is proposing another important measure for spending restraint: a three-year freeze in all nonsecurity discretionary spending starting in 2011. The freeze would be a tough measure of shared sacrifice. By 2013, it would reduce overall nonsecurity funding by \$30 billion per year relative to current inflation-adjusted funding levels.

The President also strongly supports restoring the pay-as-you-go requirement (PAYGO) that was in place in the 1990s. This law, which requires that lawmakers make the tough choices needed to offset the costs of new nonemergency spending or tax changes, helped move the government budget from deficit to surplus a decade ago. PAYGO is an important tool to force the government to live within its means and move the budget toward fiscal sustainability.

These measures mean that once the temporary rise in government spending necessitated by the economic crisis has ended, spending will be on a lower path than it otherwise would have been. Moreover, both the multi-year freeze and steps to identify additional unnecessary spending each year make the reduction gradual rather than sudden. As a result, the cumulative reduction is substantial, yet there is never a sudden, potentially disruptive drop in spending.

### Conclusion: The Distance Still to Go

The actions the Administration has taken and is proposing would reduce deficits by more than \$1 trillion over the next 10 years and by even more after that. These actions are significantly bolder steps toward deficit reduction than any taken in decades, and they will face serious opposition by those with vested interests. Even with these actions, however, the primary budget is forecast to remain in deficit in 2015. And the longer-run fiscal problem facing the country still centers on the growth of health care costs and the aging of the population. Thus, barring a substantial and sustained quickening of economic growth above its usual trend rate, further steps will be needed to get the deficit down to the target in the medium and long run.

Regardless of the form they take, these additional steps to reduce the deficit will involve sacrifices by a broad range of groups and significant compromise. Thus, a bipartisan effort will be essential. That is why the President is issuing an executive order creating a bipartisan fiscal commission to report back with a package of measures for additional deficit reduction. The charge to the commission is to propose both medium-term actions to close the gap between noninterest expenditures and tax revenues and additional steps to address the longer-term issues associated with rising health care costs, the aging of the population, and the persistent deficit. The commission's recommendations will form an important foundation on which to base policy decisions moving forward.

The Administration understands that addressing the long-run fiscal challenge will be a long and difficult task requiring commitment and shared sacrifice. But the President also believes that Americans deserve for and expect policymakers to deal with the ever-rising deficit. The changes eventually enacted will be central to the long-run preservation of both America's financial strength and the standards of living of ordinary Americans.



### CHAPTER 6

# BUILDING A SAFER FINANCIAL SYSTEM

From the ashes of the Great Depression, our leaders built a national system of financial regulation. Before 1933, there was no national regulator for stock and bond markets, no required disclosure by public firms, no national oversight of mutual funds or investment advisors, no insurance for bank depositors, and few restrictions on the activities of banks or other financial institutions. By 1940, landmark legislation had created the Securities and Exchange Commission, the Federal Deposit Insurance Corporation, new and important powers for the Federal Reserve, and disclosure requirements for virtually every major player in financial markets. The pieces of this regulatory structure fit together in a relatively cohesive whole, and the United States enjoyed a long period of relative financial calm. In the 60 years before the Great Depression, our Nation experienced seven episodes of financial panic, in which many banks were forced to shut their windows and declined to redeem deposit accounts. In the nearly 80 years since the Depression, not a single financial crisis has risen to that level.

Although the system of regulation put together during the Depression served us well for many years, warning signs appeared periodically. The savings and loan crisis of the late 1980s and early 1990s showed how banking regulation itself can have unintended consequences. At that time, deregulation coupled with generous deposit insurance combined to create a dangerous pattern of risk-taking that eventually led to a large Federal bailout of the financial system. In 1998, the collapse of Long-Term Capital Management highlighted gaps in the regulatory structure and induced the Federal Reserve Bank of New York to organize an unprecedented private rescue of an unregulated hedge fund. In 2001, the collapse of Enron laid bare the complexity of the financial operations at seemingly nonfinancial corporations and posed new challenges for accountants, policymakers, and analysts. Regulatory changes in the past 30 years responded to the specific weaknesses demonstrated by these crises, but these changes were incremental and lacked

a strategic plan. Throughout this period, the architecture created after the Great Depression was becoming increasingly inadequate to handle ongoing financial innovation. It was in this vacuum that financial innovation accelerated during the first decade of the 21st century.

The weaknesses in our outdated regulatory system nearly drove our economy into a second Great Depression. After the bankruptcy of Lehman Brothers in September 2008, credit markets froze and the Federal Government was forced to embark on increasingly aggressive intervention in financial markets. But as bad as the situation was, it could have been much worse. Courage and creativity during the depths of the crisis, and forceful stewardship by the Administration in the aftermath, have enabled our Nation to escape a second Great Depression. Chapter 2 of this report discusses the major elements of the Administration's recovery plan. This chapter focuses on the long-term changes necessary to prevent future crises.

### WHAT IS FINANCIAL INTERMEDIATION?

Suppose that the world woke up tomorrow to find all the banks gone, along with insurance companies, investment banks, mutual funds, and all the other institutions where ordinary people put their savings. What would happen? In the short run, people could keep their savings in mattresses and piggy banks, and the only apparent losses would be the forgone interest and dividends. But with no easy way to get the savings from piggy banks into productive investment, the economy would face bigger problems very quickly. Entrepreneurs with ideas would find it difficult to get capital. Large companies in need of money to restructure their operations would have no way to borrow against their future earnings. Young families would have no way to buy a house until they had personally saved enough to afford the whole thing. Our system of financial intermediation makes possible all those activities, and the infrastructure to perform that function is necessarily complex and costly.

### The Economics of Financial Intermediation

Figure 6-1 is a simplified diagram of the main function of financial intermediation: transforming savings into investment. The ultimate source of funds is shown on the left: individuals and institutions that have the final claim on wealth and wish to save some of it for the future. The ultimate use of funds is shown on the right: the productive activities that need funds for investment. The middle of the diagram can be classified as "financial intermediation." Financial intermediation uses either markets (like the stock market) or institutions (like a bank) to channel savings into investment.

In each of these cases, financial intermediaries provide three important services: information production, liquidity transformation, and diversification. The paragraphs that follow use a concrete investment example to explain these services and define the terms used in the figure.

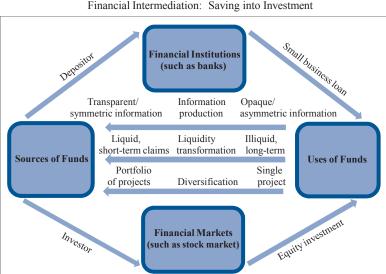


Figure 6-1 Financial Intermediation: Saving into Investment

Suppose that an entrepreneur has an idea for a new company (right side of figure) to develop a new cancer treatment. The science behind this business is specialized and complicated. He could directly approach a wealthy individual with savings (left side of figure) and ask for an investment in his company. The potential investor would immediately face two difficult problems. The first is that she does not know the quality of the entrepreneur's idea. The entrepreneur is likely to know much more about the science than does the potential investor. Maybe the entrepreneur has already asked more than 100 potential investors and been turned down by all of them. Maybe he knows that the idea has little chance of commercial success but wants to try anyway for humanitarian reasons. The investor knows none of these things and cannot learn about them without putting in real effort. In this case, there would be asymmetric information between the investor and the entrepreneur at the time of the potential investment: economists call this a problem of adverse selection.

The second problem faced by the investor is that, after she makes the investment, she needs some way to monitor the entrepreneur and make sure he is using the money in the most efficient way. Perhaps the entrepreneur

will decide to use the money for some other business or research purpose. How will the investor know? Even worse, what is to prevent the entrepreneur from using the funds for his personal benefit or taking the money without putting in any effort? In this case, there would be additional asymmetric information introduced after the investment was made: economists call this a problem of moral hazard.

To solve these adverse selection and moral hazard problems, the investor will need to expend some resources. She will need to study the technology, evaluate its chances for scientific and commercial success, and then carefully watch over the entrepreneur after the investment is made. These activities are difficult and costly, and there is no reason to believe that a typical source of funds (whose main qualification is that she has money to invest) would also be the best person to solve these problems. One important service of financial intermediation is to efficiently solve the adverse selection and moral hazard problems that come with the transformation of savings into investment. This chapter refers to this service as information production.

The second main service of financial intermediation is liquidity transformation. Consider how long it takes to develop a cancer treatment. In the United States, all new drug treatments must pass through a complex regulatory review stretched over many years. Even if a drug is eventually approved, the path to commercial success can take many more years. Most investors do not want to wait that long to see any return on their money. Individual investors have uncertain liquidity needs—jobs can be lost, family members can get sick—and even institutional investors are subject to performance evaluation over short periods. Overall, investment projects tend to have long production times, while investment sources prefer to have easy access to their money. Somebody, somewhere, must be willing to absorb the liquidity needs of the economy. In practice, these needs are provided by liquidity transformation: financial institutions and markets transform long-term (illiquid) investment projects into short-term (liquid) claims.

Liquidity transformation is also important for another, more worrisome, reason: it is the main source of the fragility that can lead to a financial crisis. Because most intermediaries have illiquid assets and liquid liabilities, any broad-based attempt by creditors to call liabilities at the same time creates an impossible situation for the intermediary. The classic example is a bank run, where holders of deposits (liquid liabilities) all "run" at the same time to withdraw their funds, leaving banks unable to sell the illiquid business loans and mortgages quickly enough to meet these demands. The same process can occur in a wide variety of nonbank institutions, as is discussed at length later in this chapter.

The third main service of financial intermediation is diversification. A single investment project can be very risky. In the case of the drug company, no investor would want her entire net worth riding on the success of just one technological project. Individual investors can minimize their risk by purchasing a diversified portfolio of investments. If, for example, an investor could pay 1 percent of the costs for 100 different drug-development projects, then her overall portfolio risk would be greatly reduced. Further diversification is achieved by dedicating only a small share of a portfolio to any given industry or country. Such diversification is a main service of most financial institutions, which take funds from many small sources and then invest across a wide variety of projects.

### Types of Financial Intermediaries

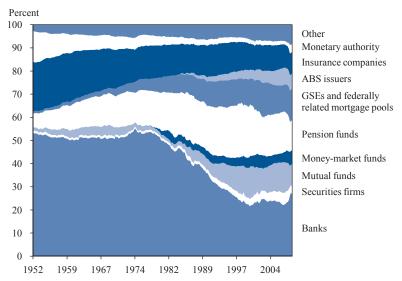
Figure 6-2 plots nominal gross domestic product (GDP) in the United States against the total assets in the financial sector and a long list of institutional types, including banks, securities firms, mutual funds, money-market funds, mortgage pools, asset-backed-securities (ABS) issuers, insurance companies, and pension funds. Figure 6-3 plots the same set of intermediaries, this time as a percentage of the total assets held by the entire financial

Trillions of dollars 60 Monetary authority 50 Insurance companies ABS issuers GSEs and federally 40 related mortgage pools Pension funds 30 Money-market funds Mutual funds Nominal GDP 20 (black line) Securities firms 10 Banks 1973 1980 1987 1994 2001

Figure 6-2 Financial Sector Assets

Sources: Federal Reserve Board, Flow of Funds; Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.5.

Figure 6-3 Share of Financial Sector Assets by Type



Source: Federal Reserve Board, Flow of Funds.

sector. All of these financial data are from the Federal Reserve's Flow of Funds.

These figures show several important trends. First, assets in the financial sector have grown much faster than GDP: from 1952 to 2009, nominal GDP grew by 4,000 percent and financial sector assets grew by 16,000 percent. This trend is important to remember in considering the regulation of finance. It would be helpful to know if the ratio of financial assets to GDP is "too big" or "too small," but no good evidence permits such a conclusion. Furthermore, modern developments in the financial system have allowed each dollar of underlying assets to multiply many times across an increasing chain of financial intermediation, so that any measurement of gross assets (as in Figure 6-2) is misleading as a measure of the "importance" of the financial sector. The concept of increasing intermediation chains is discussed later for specific institutional types.

A second important trend is that the assets held by banks grew at approximately the same rate as GDP. Nevertheless, because the overall size of the financial sector has increased, the percentage of financial sector assets held by banks has fallen over time. Third, Figure 6-3 shows the rising share of assets held by mutual funds, government sponsored enterprises (GSEs) and federally related mortgage pools, and issuers of asset-backed securities. Some of this growth can be attributed to the lengthening of the financial intermediation chain, as pension funds delegate asset management to

mutual funds, banks sell mortgages to mortgage pools, and money-market funds purchase securities from these pools.

Three long-standing institutional types are banks, securities firms, and insurance companies. Banks, including commercial banks, bank holding companies, savings institutions (thrifts), and credit unions, are still the largest component of the financial sector, with \$16.5 trillion in assets as of June 2009. Although bank assets represent 26.7 percent of the financial sector, their share has fallen precipitously since 1952, when it was 53.2 percent. Securities firms, also known as investment banks or brokerdealers, had \$2.0 trillion in assets, comprising 3.2 percent of the sector in June 2009. This percentage was down considerably from an average of 5.1 percent in 2007, because most of the largest securities firms went bankrupt, were acquired by banks, or formally converted to banks during the crisis. Insurance companies have \$5.9 trillion in assets, comprising 9.5 percent of the sector as of June 2009.

Mutual funds and pension funds are a second layer of intermediation, often standing in between investors and another institution or market. Mutual funds had \$9.7 trillion in assets, comprising 15.7 percent of the sector, in June 2009, up from only 1.6 percent in 1952 and 3.1 percent in 1980. Mutual funds take money from retail investors and invest in public securities. An important subgroup of mutual funds are money-market funds (MMFs), which are broken out separately in these figures and in the underlying Federal Reserve data. In 1990, MMFs held less than \$500 billion in assets; by June 2009, their total assets were \$3.6 trillion, comprising 5.8 percent of total financial assets. MMFs invest only in relatively safe, short-term assets. Pension funds are a large and growing share of the sector, with assets of \$8.3 trillion making up 13.5 percent of total financial assets in June 2009. Many pension assets are reinvested in mutual funds, so they show up twice in the overall totals. Thus, some of the growth in overall sector assets is driven by this extra step of intermediation.

The next category in Figure 6-2 is GSEs and federally related mortgage pools, with \$8.4 trillion in assets in June 2009. Beginning in the 1930s, various nonbank sources emerged to buy mortgages on the secondary market. By the end of the 1970s, federally related mortgage pools—which include those established by GSEs known as Fannie Mae and Freddie Mac had almost \$100 billion in assets. The growth of GSEs added an extra layer to the financial intermediation of mortgages. Here, the bank provides a loan to a borrower but then resells this loan to a GSE. The bank may hold debt securities issued by the GSE, and the GSE creates a pool that holds the mortgage.

In addition to those created by GSEs, private mortgage pools, focusing on "subprime" borrowers, have grown substantially in the past 10 years.

These private mortgage pools issue securities backed by the mortgages; these securities, known as mortgage-backed securities (MBSs), are purchased and held by mutual funds or other financial intermediaries. They are one type of an asset-backed security managed by an ABS issuer. ABS issuers do not confine themselves to mortgages; they also pool and securitize auto loans, student loans, credit card debt, and many other types of debt. Twenty years ago, few ABS issuers existed, but by June 2009 they held \$3.8 trillion in assets and comprised 6.2 percent of total financial sector assets.

The remaining categories in Figures 6-2 and 6-3 are the monetary authority (the Federal Reserve) and "other." As discussed in Chapter 2, the assets of the monetary authority increased rapidly during the crisis, but the increase is expected to be reversed as the Federal Reserve exits from its emergency programs and begins reducing the large stock of long-term securities it had purchased. The "other" category includes special purpose vehicles created to manage the emergency lending programs and various other minor groups of intermediaries.

Hedge funds are an increasingly important financial intermediary, but they are not included in Figures 6-2 and 6-3. Because of a lack of data on domestic hedge funds, the Federal Reserve classifies such funds as part of the household sector and computes the assets of this sector as a residual after everything else is added together and subtracted from total assets. The Federal Reserve is unable to get a clean number for hedge funds because they are largely unregulated private investment pools that are not required to report their holdings to any official source. Unofficial sources estimate the amount of assets held by hedge funds to have been \$1.7 trillion in 2008, but in the absence of regulatory oversight, this estimate is less reliable than the other totals shown in Figure 6-2 (Hedge Fund Research 2009).

# THE REGULATION OF FINANCIAL INTERMEDIATION IN THE UNITED STATES

Private institutions and markets should clearly play the central role in financial intermediation. But government also has a role. Economists generally favor government regulation of markets that exhibit a market failure of some kind. This chapter has already discussed two types of market failure: adverse selection and moral hazard. Both can be classified as special cases of asymmetric information, where different parties to a contract do not have the same information. The financial intermediation system alleviates asymmetric-information problems between savers and investors, but information can also be asymmetric between buyers and sellers of financial services. Just as physicians almost always know more than patients about medicine,

and lawyers more than their clients about law, banks and financial advisors should be expected to know more than their investors about investment opportunities. For this reason, there will always be a consumer protection basis for some government regulation of financial services.

Consumer protection was an important motivation for several important pieces of Depression-era legislation. The first two, the Securities Act of 1933 and the Securities Exchange Act of 1934, set forth a long list of requirements for issuing and trading public securities. The list included many types of public disclosure that persist to this day, including information about executive compensation, stockholdings, balance sheets, and income statements. The 1934 Act also created the Securities and Exchange Commission (SEC), the agency responsible for enforcing the new rules. These securities laws were the first Federal laws to regulate organized financial exchanges.

With regulated markets came the growth of intermediaries to service them. These intermediaries gained Federal oversight with the Investment Advisers Act of 1940 (for publicly available investment advisory services) and the Investment Company Act of 1940 (for mutual funds). In total, these four pieces of legislation enacted between 1933 and 1940 represented a huge change in the regulatory structure of financial markets and in most cases can be considered attempts to lessen adverse selection and moral hazard problems between investors, intermediaries, and investments.

Depression-era laws also strengthened the national system of bank regulation, adding new elements to a long pre-Depression history of Federal regulation. Beginning with the National Bank Act of 1864, federally chartered banks have been examined regularly for capital adequacy. Statechartered banks received similar examinations from both state and Federal banking agencies. Such examinations are a form of microprudential regulation, with a focus on the safety and soundness of individual institutions in isolation and with the aim of reducing asymmetric-information problems. Few bank depositors have the time or incentive to conduct detailed reviews of their banks. When regulators conduct periodic reviews and publicize the results, they create a public good of information about the safety and soundness of individual banks. Furthermore, examinations and regulations can constrain excessive risk-taking by federally insured institutions, a moral hazard problem faced by the government, rather than by bank depositors, in part because of deposit insurance.

The microprudential approach, however, is not well suited to handle risks to the entire financial system. The next section of this chapter discusses in detail the spread of crises. For now, it is sufficient to think of a crisis as an occasion when there is a sudden increase in the asymmetric-information problem in the financial system, as can happen after a large economic shock

or the failure of a major bank. The microprudential system of bank examination can alleviate asymmetric-information problems in normal times, but because the government relies on careful periodic examinations, staggered across banks, it does not have the capacity to examine all banks quickly after a shock or to evaluate the risk that a single bank failure will have on other institutions. Faced with a large economic shock, bank customers can rationally fear for the safety of their deposits. Since the upside of leaving one's money at a bank in such a situation is relatively small, but the downside—losing all one's money—is large, it is individually rational for depositors to withdraw their money when uncertainty increases. What is rational for individual depositors, however, puts an impossible strain on the whole banking system, since the liquidity transformation performed by banks cannot be quickly reversed; the illiquid loans and mortgages held by banks cannot immediately be returned to all depositors as cash.

One partial solution to the liquidity problem during banking crises is to create a "lender of last resort." This lender stands ready to make cash loans to banks that are backed by illiquid collateral: essentially, this lender serves as a new layer of liquidity transformation above the banks. This form of macroprudential policy was the traditional solution to banking crises in Europe in the 19th century but did not come to the United States until the Federal Reserve Act of 1913 created the first version of the Federal Reserve System as a lender of last resort.

But a lender of last resort, by itself, is unable to prevent bank runs across the entire system. Even illiquid collateral must be given a value by the lender—by law the Federal Reserve can only make secured loans—and if the entire system is failing at the same time, there may be no way for a central bank to estimate reasonable valuations quickly enough. A lender of last resort is designed to solve liquidity problems, not solvency problems, but in a severe crisis, these two problems can become inextricably tied together. (This problem arose during the current crisis, when Lehman Brothers was unable to provide enough collateral to qualify for sufficient Federal Reserve loans.) During the Great Depression, some 9,000 bank failures occurred between 1930 and 1933, well above the number of failures in earlier panics. Shortly after taking office in 1933, President Franklin Roosevelt gave his first "fireside chat" and implied a government guarantee for all bank deposits. The Banking Act of 1933 made the guarantee explicit by creating deposit insurance through a new agency, the Federal Deposit Insurance Corporation (FDIC). In the 75 years that followed, the United States averaged fewer than 30 commercial bank failures a year. The FDIC is a crucial piece of macroprudential regulation in that it provides a guarantee to all insured banks, regardless of the condition of any specific bank. Within the account limits

of FDIC insurance, no depositor needs to worry about the soundness of her bank; thus, the FDIC guarantee eliminates most asymmetric-information problems that could lead to bank runs.

A constant tension in macroprudential regulation is that the attempt to prevent bank runs can itself lead to new forms of moral hazard. Because they have deposit insurance, small depositors no longer need to monitor the safety of their banks; therefore, unless regulators are watching carefully, the banks may take excessive risks with no fear of losing deposits. This latent problem was exacerbated during the 1980s by deregulation in the thrift industry. Following this deregulation, thrift institutions began aggressively seeking out deposits by paying ever-higher interest rates and then intermediating these deposits into speculative investments. This strategy allowed thrifts to use FDIC insurance to gamble for solvency, and when the investments failed, a wave of thrift failures swept through Texas, the Midwest, and New England in the 1980s and early 1990s. This wave, now known as the savings and loan crisis, represented the first significant increase in bank failures since the Great Depression. The failures, it should be noted, were not caused by bank runs—they were not driven by a liquidity mismatch between deposits and loans. Deposit insurance remained intact, and no insured deposit lost any money. Rather, the bank failures were caused by the insolvency of the banks, as they gambled and lost with (effectively) government money. Nevertheless, even in the absence of bank runs, many economists believe that the savings and loan crisis contributed to the "credit crunch" and recession of 1990-91.

There has been no fundamental restructuring of the Nation's financial regulatory system since the Great Depression. All changes since that time have been piecemeal responses to specific events, added individually onto the original superstructure. That regulatory stasis has led to four major gaps in the current system. First, many of the newer financial institutions hedge funds, mortgage pools, asset-backed-securities issuers—have grown rapidly while being subject to only minimal Federal regulation. These new institutions suffer from many of the asymmetric-information problems that banks faced before the Depression-era reforms. Second, overlapping jurisdictions and mandates have led to regulatory competition between agencies and regulatory "shopping" by institutions. Such competition is yet another form of moral hazard—now centered on the regulators themselves. Third, regulators operate separately in functional silos of banking, insurance, and securities. Many of the largest institutions perform all these activities at once but are not subject to robust consolidated regulation and supervision. And finally, most of the regulatory system is microprudential and focused on the safety and soundness of specific institutions. No regulator is tasked with

taking a macroprudential approach, which attempts to monitor, recognize, and alleviate risks to the financial system as a whole. Such macroprudential regulation would require explicit rules for the orderly resolution of all large financial institutions, not just the banks currently resolved by the FDIC. In short, because of these four gaps, the failure of one institution imposes negative externalities on others, and there is no coherent system for fixing these externalities.

Of the four gaps, the last requires the most urgent reform and the biggest change in regulatory thinking. The financial crisis made clear how rapidly failures can spread across institutions and affect the whole system. A primary challenge of macroprudential regulation is to recognize such "contagion" and categorize and counteract all the different ways it can manifest. The next section of the chapter turns to this task.

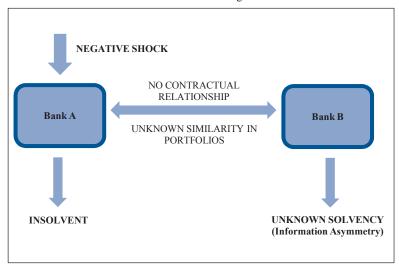
# FINANCIAL CRISES: THE COLLAPSE OF FINANCIAL INTERMEDIATION

A financial crisis is a collapse of financial intermediation. In a crisis, the ability of the financial system to move savings into investment is severely impaired. In an extreme crisis, banks close their doors, financial markets shut down, businesses are unable to finance their operations, and households are challenged to find credit. A financial crisis can be triggered by events that are completely external to the financial system. If a large macroeconomic shock hits all banks at the same time, regulators can do little to control the damage. Some crises, however, are triggered or exacerbated by shocks to a small group of institutions that then spread to others. This spread, known as contagion, is a form of negative externality imposed by distressed institutions. The recent financial crisis involved three different types of contagion, referred to in this chapter as confidence contagion, counterparty contagion, and coordination contagion. A macroprudential regulator must have the tools to handle all three.

## Confidence Contagion

The classic example of a "run on the bank" is shown in Figure 6-4. Banks are mostly financed by deposits, which are then lent out as loans to businesses and mortgages for homeowners. A bank's balance sheet has a maturity mismatch between assets (the loans) and liabilities (the deposits): the loans are long term, with payments coming over many years, while the deposits are short term and can be withdrawn at any time. The liquidity transformation service of the bank works in ordinary times but breaks down if all the depositors ask for their money back at the same time.

Figure 6-4 Confidence Contagion



Suppose, for example, a depositor in Bank A hears a rumor that other depositors in Bank A are withdrawing their funds. He does not know the explanation. It might be that Bank A has a problem with solvency, that a fair accounting would show that its liabilities exceed its assets. Typically, a depositor does not have the necessary information to form an accurate judgment about solvency. So what does he do? The safe thing, in the absence of deposit insurance, is to go to the bank and take out his money. Perhaps these other depositors know something that he does not. If he waits too long, the bank will be out of cash and unable to redeem his account.

It is easy to see how the run at Bank A could lead to runs at other banks. The public spectacle of long lines of depositors waiting outside a bank is enough to make other banks' customers nervous—the negative externality on confidence. Perhaps Bank A had many real estate loans in some trouble area, and Bank B has an unknown number of similar loans. The issue here is that bank depositors do not want to take the risk of leaving their money in a failing bank. Unlike stock market investors, who expect to take risks and face complicated problems in forecasting the future path of company profits, bank depositors want their money to be safe and do not want to spend an enormous amount of time making sure that it is. The information production service of banks cannot quickly be replaced if the bank is in trouble. Banks, therefore, have historically been subject to runs, and the runs have spread quickly across banks, a phenomenon called confidence contagion.

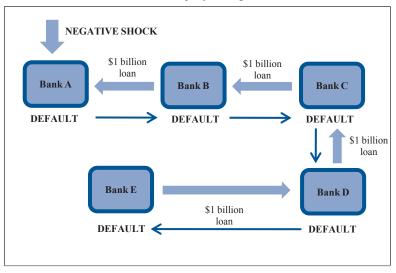
Classic bank runs were commonplace in the United States before (and during) the Great Depression. In the post-FDIC world, bank failure has become a problem of insolvency, not illiquidity. FDIC insurance works almost perfectly up to a current limit of \$250,000 for each account. What happens above this limit? What of the many corporations and investors who want a safe place to put their million-dollar and billion-dollar deposits? In the absence of insured accounts at this level, they choose such alternatives as money-market funds, collateralized short-term loans to financial institutions, and complex derivative transactions. In each of these cases, the effort to find safe, liquid investments can lead to situations that look identical to a classic bank run, but with different players. When a single investment bank (Bear Stearns in March 2008) or money-market fund (the Reserve Fund in September 2008) gets into solvency trouble, confidence can quickly erode at similar institutions. Macroprudential regulation must stop this confidence contagion or, at least, contain it to one segment of the financial system.

### **Counterparty Contagion**

Counterparty contagion is illustrated in Figure 6-5. Here, Bank A owes \$1 billion to Bank B, which owes \$1 billion to Bank C, with this same debt going through the alphabet to Bank E. When Bank A goes out of business owing money to Bank B, then Bank B cannot pay Bank C. To the extent that Bank C lacks the information or the ability to insure against the failure of Bank A, that failure imposes an externality. One failure could lead to defaults all the way to Bank E. Such contagion seems particularly wasteful, because most of it could be averted by getting rid of all the steps in the middle: the only banks here with net exposure are Banks A and E; once the middle is eliminated, all that is left is a \$1 billion debt of A to E.

Derivatives are an important modern vehicle for counterparty chains. A derivative is any security whose value is based completely on the value of one or more reference assets, rates, or indexes. For example, a simple derivative could be constructed as the promise by Party B to pay \$1 to Party A if and only if the stock price of Company XYZ is above \$200 a share on December 31, 2012. This contract is a derivative because its payoff is completely "derived" from the value of XYZ stock; the contract has no meaning that is independent of XYZ stock. Things begin to grow more complicated when Party A and Party B begin to make offsetting trades with other parties, creating counterparty exposures among the group of market participants. For example, Party B, having taken on the risk that XYZ will climb above \$200 a share, may at some point decide to offset this risk by purchasing a similar option from Party C. Eventually, Party C makes the reverse trade with Party D, and soon the chain can extend across the alphabet.

Figure 6-5 Counterparty Contagion

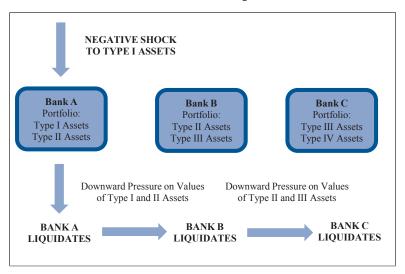


### **Coordination Contagion**

Coordination contagion is illustrated in Figure 6-6. Here, Bank A owns many assets of Type I and Type II; Bank B owns many assets of Type II and Type III; and Bank C owns many assets of Type III and Type IV. Suppose that a negative shock to the value of Type I assets threatens the solvency of Bank A. In an effort to remain in business, Bank A begins to liquidate its portfolio by selling Type I and Type II assets. As is typical for banks, these underlying assets are relatively illiquid, so it is difficult for Bank A to sell substantial quantities without depressing the price of the assets. As the prices of Type II assets fall, Bank B is in a quandary. The market value of its assets is falling, and the regulators of Bank B may insist that it reduce its leverage or raise more capital. Bank B may then sell Type II and Type III assets to achieve this goal. Again, it is easy to see how this process could flow through the alphabet. Here the process is called coordination contagion because it is driven by the coordinated holdings of the banks, rather than by confidence of investors (in any particular bank) or the chains of contractual relationships (among banks) that lead to counterparty contagion. The externality occurs here only because the underlying assets are illiquid. With this illiquidity, the transactions of each player can significantly affect the price, and the forced sale by one bank harms all the others that own these assets.

Coordination contagion is exacerbated if failing institutions are forced to liquidate their positions quickly. In the fall of 2008, many large financial institutions had significant holdings of subprime housing and other

Figure 6-6 Coordination Contagion



structured instruments on their balance sheets. With capital scarce and uncertainty about the value of these assets high, distressed institutions faced pressure to sell these assets. If the most desperate institutions sold first, then the depressed prices of these sales would then place pressure on other institutions to mark down the values of these assets on their balance sheets, further exacerbating the problem. One partial solution to this coordination contagion would be to allow the most distressed institutions to exit their positions slowly, so as not to further destabilize the illiquid market for these assets. Such slow exits can be enabled by taking failing institutions into a form of receivership or conservatorship, an enhanced "resolution authority" for nonbank financial institutions that would be analogous to the FDIC process for failing depository institutions.

# PREVENTING FUTURE CRISES: REGULATORY REFORM

The Financial Stability Plan and other policies to address the current crisis described in Chapter 2 have had a positive short-run effect on the financial system. To prevent future crises and achieve long-term stability, however, it will be necessary to fill the gaps in the current regulatory system. The Administration is working closely with Congress to build a regulatory

system for the 21st century.<sup>1</sup> The plan for regulatory reform has five key parts, each covering a different aspect of the financial intermediation system illustrated by Figure 6-1. The parts of the plan are discussed below, with references back to the relevant sections of Figure 6-1.

### Promote Robust Supervision and Regulation of Financial Firms

If the recent financial crisis has proven anything, it is that we have outgrown our Depression-era financial regulatory system. Although most of the largest, most interconnected, and most highly leveraged financial firms were subject to some form of supervision and regulation before the crisis, those forms of oversight proved inadequate and inconsistent. The financial institutions at the top of Figure 6-1 are a varied group that is no longer dominated by traditional commercial banks. A modern regulatory system must account for the entire group.

Three primary weaknesses inherent in the current system led to the crisis. First, capital and liquidity requirements for institutions were simply not high enough. Regulation failed because firms were not required to hold sufficient capital to cover trading assets, high-risk loans, and off-balance-sheet commitments, or to hold increased capital during good times in preparation for bad times. Nor were firms required to plan for liquidity shortages.

Second, various agencies shared responsibility for supervising the consolidated operations of large financial firms. This fragmentation of supervisory responsibility, in addition to loopholes in the legal definition of a "bank," made it possible for owners of banks and other insured depository institutions to shop for the most lenient regulator.

Finally, other types of financial institutions were subject to insufficient government oversight. Money-market funds were vulnerable to runs, but unlike their banking cousins, they lacked both regulators and insurers. Major investment banks were subject to a regulatory regime through the SEC that is now moot, since large independent investment banks no longer exist. Meanwhile, hedge funds and other private pools of capital operated completely outside the existing supervisory framework.

In combination, these three sets of weaknesses increased the likelihood that some firms would fail and made it less likely that problems at these firms would be detected early. This was a breakdown in the supervision under current authority over individual institutions. But glaring problems were also created by a lack of focus on large, interconnected, and highly leveraged institutions that could inflict harm both on the financial system and on the

<sup>&</sup>lt;sup>1</sup> This section is based heavily on the Administration's white paper on financial reform (Department of the Treasury 2009).

economy if they failed. No regulators were tasked with responsibility for contagion, whether from confidence, counterparties, or coordination.

To solve these problems and ensure the long-term health of the financial system, the government must create a new foundation for the regulation of financial institutions. To do that, the Administration will promote more robust and consistent regulatory standards for all financial institutions. Not only should similar financial institutions face the same supervisory and regulatory standards, but the system can contain no gaps, loopholes, or opportunities for arbitrage.

The Administration has also proposed creating a Financial Services Oversight Council (FSOC). This body, chaired by the Secretary of the Treasury, would facilitate coordination of policy and resolution of disputes and identify emerging risks and gaps in supervision in firms and market activities. The heads of the principal Federal financial regulators would be members of the Council, which would benefit from a permanent staff at the Department of the Treasury.

Finally, the Federal Reserve's current supervisory authority for bank holding companies must evolve along with the financial system. Regardless of whether they own an insured depository institution, all large, interconnected firms whose failure may threaten the stability of the entire system should be subject to consolidated supervision by the Federal Reserve. To that end, the Administration proposes creating a single point of accountability for the consolidated supervision of all companies that own a bank. These firms should not be allowed or able to escape oversight of their risky activities by manipulating their legal structures.

Taken together, these proposals will help reduce the weaknesses in the financial regulatory system by more stringently regulating the largest, most interconnected, and most highly leveraged institutions. In effect, the Administration's proposals would operate on the simple principle that firms that could pose higher risks should be subject to higher standards. Furthermore, both the Federal Reserve and the FSOC would operate through a macroprudential prism and be wary of contagion in all its forms.

## Establish Comprehensive Regulation of Financial Markets

The financial crisis followed a long and remarkable period of growth and innovation in the Nation's financial markets. These new financial markets, found in the bottom part of Figure 6-1, still rely on regulation put together in response to the Great Depression, when stocks and bonds were the main financial products for which there were significant markets. But over time, new financial instruments allowed credit risks to be spread widely, enabling investors to diversify their portfolios in new ways and

allowing banks to shed exposures that once would have had to remain on their balance sheets. As discussed earlier, securitization allowed mortgages and other loans to be aggregated with similar loans, segmented, and sold in tranches to a large and diverse pool of new investors with varied risk preferences. Credit derivatives created a way for banks to transfer much of their credit exposure to third parties without the outright selling of the underlying assets. At the time, this innovation in the distribution of risk was perceived to increase financial stability, promote efficiency, and contribute to a better allocation of resources.

Far from transparently distributing risk, however, the innovations often resulted in opaque and complex risk concentrations. Furthermore, the innovations arose too rapidly for the market's infrastructure, which consists of payment, clearing, and settlement systems, to accommodate them, and for the Nation's financial supervisors to keep up with them. Furthermore, many individual financial institutions' risk management systems failed to keep up. The result was a disastrous buildup of risk in the over-the-counter (OTC) derivatives markets. In the run-up to the crisis, many believed these markets would distribute risk to those most able to bear it. Instead, these markets became a major source of counterparty contagion during the crisis.

In response to these problems, the Administration proposes creating a more coherent and coordinated regulatory framework for the markets for OTC derivatives and asset-backed securities. The Administration's proposal, which aims to improve both transparency and market discipline, would impose record-keeping and reporting requirements on all OTC derivatives. The Administration further proposes strengthening the prudential regulation of all dealers in the OTC derivative markets and requiring all standardized OTC derivative transactions to be executed in regulated and transparent venues and cleared through regulated central counterparties. The primary goal of these regulatory changes is to reduce the possibility of the sort of counterparty contagion seen in the recent crisis. Moving activity to a centralized clearinghouse can effectively break the chain of failures by netting out middleman parties. A successful clearinghouse can reduce the counterparty contagion illustrated in Figure 6-5 to a single debt owned by Bank A to Bank E, thus sparing Banks B, C, and D from the problems.

The Administration has also proposed enhancing the Federal Reserve's authority over market infrastructure to reduce the potential for contagion among financial firms and markets. After all, even a clearinghouse can fail, and regulators must be alert to this danger. Finally, the Administration proposes harmonizing the statutory and regulatory regimes between the futures and securities markets. Although important distinctions exist between the two, many differences in regulation between them are no longer

justifiable. In particular, the growth and innovation in derivatives and derivatives markets have highlighted the need to address gaps and inconsistencies in the regulation of these products by the Commodity Futures Trading Commission (CFTC) and the SEC. In October 2009, the SEC and the CFTC issued a joint report identifying major areas necessary to reconcile their regulatory approaches and outlining a series of regulatory and statutory recommendations to narrow or where possible eliminate those differences.

## Provide the Government with the Tools It Needs to Manage Financial Crises

During the recent crisis, the financial system was strained by the failure or near-failure of some of the largest and most interconnected financial firms. Thanks to lessons learned from past crises, the current system already has strong procedures for handling bank failure. However, when a bank holding company or other nonbank financial firm is in severe distress, it has only two options: obtain outside capital or file for bankruptcy. In a normal economic climate, these options would be suitable and would pose no consequences for broader financial stability. However, during a crisis, distressed institutions may be hard-pressed to raise sufficient private capital. Thus, if a large, interconnected bank holding company or other nonbank financial firm nears failure during a financial crisis, its only two options are untenable: to obtain emergency funding from the U.S. Government, as in the case of AIG; or to file for bankruptcy, as in the case of Lehman Brothers. Neither option manages the resolution of the firm in a manner that limits damage to the broader economy at minimal cost to the taxpayer.

This situation is unacceptable. A way must be found to address the potential failure of a bank holding company or other nonbank financial firm when the stability of the financial system is at risk. To solve this issue, the Administration proposes creating a new authority modeled on the existing authority of the FDIC. The Administration has also proposed that the Federal Reserve Board receive prior written approval from the Secretary of the Treasury for emergency lending under its "unusual and exigent circumstances" authority to improve accountability in the use of other crisis tools. The goal of these proposals is to allow for an orderly resolution of all large institutions—not just banks—so that the coordination contagion depicted in Figure 6-6 does not again threaten the entire financial system. Taking nonbank financial institutions into receivership or conservatorship would make it possible to sell assets slowly and with minimal disruption to the values of similar assets at otherwise healthy institutions.

## Raise International Regulatory Standards and Improve **International Cooperation**

The system in Figure 6-1 cannot be managed by one country alone, because its interconnections are global. As the recent crisis has illustrated, financial stress can spread quickly and easily across borders. Yet regulation is still set largely in a national context and has failed to effectively adapt. Without consistent supervision and regulation, rational financial institutions will see opportunity in this situation and move their activities to jurisdictions with looser standards. This can create a "race to the bottom" situation.

The United States is addressing this issue by playing a strong leadership role in efforts to coordinate international financial policy through the Group of Twenty (G-20), the G-20's newly established Financial Stability Board, and the Basel Committee on Banking Supervision. The goal is to promote international initiatives compatible with the domestic regulatory reforms described in this report. These efforts have already borne fruit. In September, the G-20 met in Pittsburgh and agreed in principle to this goal. And while those processes are ongoing, significant progress has been made in agreements strengthening prudential requirements, including capital and liquidity standards; expanding the scope of regulation to nonbank financial institutions, hedge funds, and over-the-counter derivatives markets; and reinforcing international cooperation on the supervision of globally active firms.

#### Protect Consumers and Investors from Financial Abuse

Before the financial crisis, numerous Federal and state regulations protected consumers against fraud and promoted understanding of financial products like credit cards and mortgages. But as abusive practices spread, particularly in the subprime and nontraditional mortgage markets, the Nation's outdated regulatory framework proved inadequate in crucial Although multiple agencies now have authority over consumer protection in financial products, the supervisory framework for enforcing those regulations has significant shortcomings rooted in history. State and Federal banking regulators have a primary mission to promote safe and sound banking practices—placing consumer protection in a subordinate position—while other agencies have a clear mission but limited tools and jurisdiction. In the run-up to the financial crisis, mortgage companies and other firms outside of the purview of bank regulation exploited the lack of clear accountability by selling subprime mortgages that were overly complicated and unsuited to borrowers' particular financial situations. Banks and

thrifts eventually followed suit, with disastrous results for consumers and the financial system at large.

In 2009, Congress, the Administration, and numerous financial regulators took significant measures to address some of the most obvious inadequacies in the consumer protection framework. One notable achievement was the Credit Card Accountability, Responsibility, and Disclosure Act, signed into law by the President on May 22, 2009. This Act outlaws some of the most unfair and deceptive practices in the credit card industry. For example, it requires that payments be applied to the balances with the highest interest rate first; bans retroactive increases in interest rates for reasons having nothing to do with the cardholder's record with the credit card; prohibits a variety of gimmicks with due dates and "double-cycle fees"; and requires clearer disclosure and ensures consumer choice.

However, given the weaknesses that the recent financial crisis highlighted, it is clear that the consumer protection system needs comprehensive reform across all markets. For that reason the Administration has proposed creating a single regulatory agency, a Consumer Financial Protection Agency (CFPA), with the authority and accountability to make sure that consumer protection regulations are written fairly and enforced vigorously. The CFPA should reduce gaps in Federal supervision and enforcement, improve coordination with the states, set higher standards for financial intermediaries, and promote consistent regulation of similar products.

#### Conclusion

Our Nation's system of financial intermediation is a powerful engine for economic growth. Productive investment projects are risky, complex to evaluate and monitor, and require long periods of waiting with no returns and illiquid capital. Investors who provide the funds for these projects would be far less willing to do so if they had to absorb all these risks and costs. Bridging the gap between savings and investment requires the efforts of millions of talented professionals collectively performing the services of information production, liquidity transformation, and diversification. In the recent financial crisis this complex system broke down.

To prevent another such crisis from paralyzing our economy, the Administration has embarked on an ambitious plan to modernize the framework of financial regulation. The keystone of the new framework is an emphasis on macroprudential regulation. The regulatory system's past focus on individual institutions served the Nation well for many decades but is now outdated. A modern system that can meet the needs of the 21st century must have the tools to monitor and regulate the interconnections that cause financial crises.



#### CHAPTER 7

## REFORMING HEALTH CARE

In recent years, rising health care costs in the United States have imposed tremendous economic burdens on families, employers, and governments at every level. The number of people without health insurance has also risen steadily, with recent estimates from the Census Bureau indicating that more than 46 million were uninsured in 2008.

With the severe recession exacerbating these problems, Congress and the President worked together during the past year to enact several health care policies to cushion the impact of the economic downturn on individuals and families. For example, just two weeks after taking office, the President signed into law an expansion of the Children's Health Insurance Program (CHIP), which will extend health insurance to nearly 4 million low- and middle-income uninsured children by 2013. Additionally, legislation that increased funding for COBRA (Consolidated Omnibus Budget Reconciliation Act) health insurance coverage allowed many working Americans who lost their jobs to receive subsidized health insurance for themselves and their families, helping to reduce the number of uninsured below what it otherwise would have been.

In late 2009, both the House and the Senate passed major health reform bills, bringing the United States closer to comprehensive health insurance reform than ever before. The legislation would expand insurance coverage to more than 30 million Americans, improve the quality of care and the security of insurance coverage for individuals with insurance, and reduce the growth rate of costs in both the private and public sectors. These reforms would improve the health and economic well-being of tens of millions of Americans, allow employers to pay higher wages to their employees and to hire more workers, and reduce the burden of rising health care costs on Federal, state, and local governments.

# THE CURRENT STATE OF THE U.S. HEALTH CARE SECTOR

Although health outcomes in the United States have improved steadily in recent decades, the U.S. health care sector is beset by rising spending, declining rates of health insurance coverage, and inefficiencies in the delivery of care. In the United States, as in most other developed countries, advances in medical care have contributed to increases in life expectancy and reductions in infant mortality. Yet the unrelenting rise in health care costs in both the private and public sectors has placed a steadily increasing burden on American families, businesses, and governments at all levels.

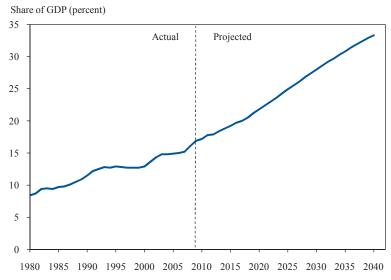
#### Rising Health Spending in the United States

For the past several decades, health care spending in the United States has consistently risen more rapidly than gross domestic product (GDP). Recent projections suggest that total spending in the U.S. health care sector exceeded \$2.5 trillion in 2009, representing 17.6 percent of GDP (Sisko et al. 2009)—approximately twice its share in 1980 and a substantially greater portion of GDP than that of any other member of the Organisation for Economic Co-Operation and Development (OECD). As shown in Figure 7-1, estimates from the Congressional Budget Office (CBO) in June 2009 projected that this trend would continue in the absence of significant health insurance reform. More specifically, CBO estimated that health care spending would account for one-fourth of GDP by 2025 and one-third by 2040 (Congressional Budget Office 2009d).

The steady growth in health care spending has placed an increasingly heavy financial burden on individuals and families, with a steadily growing share of workers' total compensation going to health care costs. According to the most recent data from the U.S. Census Bureau, inflation-adjusted median household income in the United States declined 4.3 percent from 1999 to 2008 (from \$52,587 to \$50,303), and real weekly median earnings for full-time workers increased just 1.8 percent. During that same period, the real average total cost of employer-sponsored health insurance for a family policy rose by more than 69 percent (Kaiser Family Foundation and Health Research and Educational Trust 2009).

Because firms choose to compensate workers with either wages or benefits such as employer-sponsored health insurance, increasing health care costs tend to "crowd out" increases in wages. Therefore, these rapid

Figure 7-1 National Health Expenditures as a Share of GDP



Source: Congressional Budget Office (2009d).

increases in employer-sponsored health insurance premiums have resulted in much lower wage growth for workers.

When considering these divergent trends, it is also important to remember that workers typically pay a significant share of their health insurance premiums out of earnings. According to data from the Kaiser Family Foundation, the average employee share for an employer-sponsored family policy was 27 percent in both 1999 and 2008. In real dollars, the average total family premium increased by \$5,200 during this nine-year period. Thus, the amount paid by the typical worker with employer-sponsored health insurance increased by more than \$1,400 from 1999 to 2008. Subtracting these average employee contributions from median household income in each year gives a rough measure of "post-premium" median household income. By that measure, the decline in household income swells from 4.3 percent to 7.3 percent (that is, post-premium income fell from \$50,566 to \$46,879).

This point is further reinforced when one considers the implications of rapidly rising health care costs for the wage growth of workers in the years ahead. As Figure 7-2 shows, compensation net of health insurance premiums is projected to grow much less rapidly than total compensation,

with the growth eventually turning negative by 2037. Put simply, if health care costs continue to increase at the rate that they have in recent years, workers' take-home wages are likely to grow slowly and eventually decline.

2008 dollars per person 120,000 Actual Projected 110,000 100,000 Estimated annual total compensation 90,000 80.000 70,000 60,000 Estimated annual total compensation 50,000 net of health insurance premiums 40,000 30,000 2003 2007 2011 2015 2019 2023 2027 2031 2035 2039

Figure 7-2
Total Compensation Including and Excluding Health Insurance

Note: Health insurance premiums include the employee- and employer-paid portions. Sources: Actual data from Department of Labor (Bureau of Labor Statistics); Kaiser Family Foundation and Health Research and Educational Trust (2009); Department of Health and Human Services (Agency for Healthcare Research and Quality, Center for Financing, Access, and Cost Trends), 2008 Medical Expenditure Panel Survey-Insurance Component. Projections based on CEA calculations.

Rising health care spending has placed similar burdens on the 45 million aged and disabled beneficiaries of the Medicare program, whose inflation-adjusted premiums for Medicare Part B coverage—which covers outpatient costs including physician fees—rose 64 percent (from \$1,411 to \$2,314 per couple per year) between 1999 and 2008. During that same period, average inflation-adjusted Social Security benefits for retired workers grew less than 10 percent. Rising health insurance premiums are thus consuming larger shares of workers' total compensation and Medicare recipients' Social Security benefits alike.

<sup>&</sup>lt;sup>1</sup> The upper curve of Figure 7-2 displays historical annual compensation per worker in the nonfarm business sector in constant 2008 dollars from 1999 through 2009, deflated with the CPI-U-RS. Real compensation per worker is projected using the Administration's forecast from 2009 through 2020 and at a 1.8 percent annual rate in the subsequent years. The lower curve plots historical real annual compensation per person net of average total premiums for employer-sponsored health insurance during the same period. The assumed growth rate of employer-sponsored premiums is 5 percent, which is slightly lower than the average annual rate as reported by the Kaiser Family Foundation during the 1999 to 2009 period.

The corrosive effects of rising health insurance premiums have not been limited to businesses and individuals. Increases in outlays for programs such as Medicare and Medicaid and rising expenditures for uncompensated care caused by increasing numbers of uninsured Americans have also strained the budgets of Federal, state, and local governments. The fraction of Federal spending devoted to health care rose from 11.1 percent in 1980 to 25.2 percent in 2008. In the absence of reform, this trend is projected to continue, resulting in lower spending on other programs, higher taxes, or increases in the Federal deficit.

The upward trend in health care spending has also posed problems for state governments, with spending on the means-tested Medicaid program now the second largest category of outlays in their budgets, just behind elementary and secondary education. Because virtually all state governments must balance their budgets each year, the rapid increases in Medicaid spending have forced lawmakers to decide whether to cut spending in areas such as public safety and education or to increase taxes.

If health care costs continue rising, the consequences for government budgets at the local, state, and Federal level could be dire. And as discussed in Chapter 5, projected increases in the costs of the Medicare and Medicaid programs are a key source of the Federal Government's long-term fiscal challenges.

## Market Failures in the Current U.S. Health Care System: Theoretical Background

As described by Nobel Laureate Kenneth Arrow in a seminal 1963 paper, an individual's choice to purchase health insurance is rooted in the economics of risk and uncertainty. Over their lifetimes, people face substantial risks from events that are largely beyond their control. When possible, those who are risk-averse prefer to hedge against these risks by purchasing insurance (Arrow 1963).

Health care is no exception. When people become sick, they face potentially debilitating medical bills and often must stop working and forgo earnings. Moreover, medical expenses are not equally distributed: annual medical costs for most people are relatively small, but some people face ruinously large costs. Although total health care costs for the median respondent in the 2007 Medical Expenditure Panel Survey were less than \$1,100, costs for those at the 90th percentile of the distribution were almost 14 times higher (Department of Health and Human Services 2009). As a result, risk-averse people prefer to trade an uncertain stream of expenses for medical care for the certainty of a regular insurance payment, which buys a policy that pays for the high cost of treatment during illness or injury. Economic theory and

common sense suggest that purchasing health insurance to hedge the risk associated with the economic costs of poor health makes people better off.

Health insurance markets, however, do not function perfectly. The economics literature documents four primary impediments: adverse selection, moral hazard, the Samaritan's dilemma, and problems arising from incomplete insurance contracts. In a health insurance market characterized by these and other sources of inefficiency, well-designed government policy has the potential to reduce costs, improve efficiency, and benefit patients by stabilizing risk pools for insurance coverage and providing needed coverage to those who otherwise could not afford it.

Adverse Selection. In the case of adverse selection, buyers and sellers have asymmetric information about the characteristics of market participants. People with larger health risks want to buy more generous insurance, while those with smaller health risks want lower premiums for coverage. Insurers cannot perfectly determine whether a potential purchaser is a large or small health risk.

To understand how adverse selection can harm insurance markets, suppose that a group of individuals is given a choice to buy health insurance or pay for medical costs out-of-pocket. The insurance rates for the group will depend on the average cost of health care for those who elect to purchase insurance. The healthiest members of the group may decide that the insurance is too expensive, given their expected costs. If they choose not to get insurance, the average cost of care for those who purchase insurance will increase. As premiums increase, more and more healthy individuals may choose to leave the insurance market, further increasing average health care costs for those who purchase insurance. Over time, this winnowing process can lead to declining insurance rates and even an unraveling of health insurance markets. Without changes to the structure of insurance markets, the markets can break down, and fewer people can receive insurance than would be optimal. Subsidies to encourage individuals to purchase health insurance can help combat adverse selection, as can regulations requiring that individuals purchase insurance, because both ensure that healthier people enter the risk pool along with their less healthy counterparts.

Under current institutional arrangements, adverse selection is likely to be an especially large problem for small businesses and for people purchasing insurance in the individual market. In large firms, where employees are generally hired for reasons unrelated to their health, high-and low-risk employees are automatically pooled together, reducing the probability of low-risk employees opting out of coverage or high-risk workers facing extremely high premiums. In contrast, small employers cannot pool risk across a large group of workers, and thus the average risk

of a given small firm's employee pool can be significantly above or below the population average. As such, similar to the market for individual insurance described above, firms with low-risk worker pools will tend to opt out of insurance coverage, leaving firms with high-risk pools to pay much higher premiums.

Moral Hazard. A second problem with health insurance is moral hazard: the tendency for some people to use more health care because they are insulated from its price. When individuals purchase insurance, they no longer pay the full cost of their medical care. As a result, insurance may induce some people to consume health care on which they place much less value than the actual cost of this care or discourage patients and their doctors from choosing the most efficient treatment. This extra consumption could increase average medical costs and, ultimately, insurance premiums. The presence of moral hazard suggests that research into which treatments deliver the greatest health benefits could encourage doctors and patients to adopt best practices.

Samaritan's Dilemma. A third source of inefficiency in the insurance market is that society's desire to treat all patients, even those who do not have insurance and cannot pay for their care, gives rise to the Samaritan's dilemma. Because governments and their citizens naturally wish to provide care for those who need it, people who lack insurance and cannot pay for medical care can still receive some care when they fall ill. Some people may even choose not to purchase insurance because they understand that emergency care may still be available to them. In the context of adverse selection, a low insurance rate is a symptom of underlying inefficiencies. Viewed through the lens of the Samaritan's dilemma, in contrast, the millions of uninsured Americans are one source of health care inefficiencies.

The burden of paying for some of this uncompensated care is passed on to people who do purchase insurance. The result is a "hidden tax" on health insurance premiums, which in turn exacerbates adverse selection by raising premiums for individuals who do not opt out of coverage. One estimate suggests that the total amount of uncompensated care for the uninsured was approximately \$56 billion in 2008 (Hadley et al. 2008).

Incomplete Insurance Contracts. Many economic transactions involve a single, straightforward interaction between a buyer and a seller. In many purchases of goods, for example, the prospective buyer can look the good over carefully, decide whether or not to purchase it, and never interact with the seller again. Health insurance, in contrast, involves a complex relationship between an insurance company and a patient that can last years or even decades. It is not possible to foresee and spell out in detail every contingency that may arise and what is and is not covered.

When individuals are healthy, their medical costs are typically lower than their premiums, and these patients are profitable for insurance companies. When patients become ill, however, they may no longer be profitable. Insurance companies therefore have a financial incentive to find ways to deny care or drop coverage when individuals become sick, undermining the central purpose of insurance. For example, in most states, insurance companies can rescind coverage if individuals fail to list any medical conditions—even those they know nothing about—on their initial health status questionnaire. Entire families can lose vital health insurance coverage in this manner. A House committee investigation found that three large insurers rescinded nearly 20,000 policies over a five-year period, saving these companies \$300 million that would otherwise have been paid out as claims (Waxman and Barton 2009).

A closely related problem is that insurance companies are reluctant to accept patients who may have high costs in the future. As a result, individuals with preexisting conditions find obtaining health insurance extremely expensive, regardless of whether the conditions are costly today. This is a major problem in the individual market for health insurance. Forty-four states now permit insurance companies to deny coverage, charge inflated premiums, or refuse to cover whole categories of illnesses because of preexisting medical conditions. A recent survey found that 36 percent of non-elderly adults attempting to purchase insurance in the individual market in the previous three years faced higher premiums or denial of coverage because of preexisting conditions (Doty et al. 2009). In another survey, 1 in 10 people with cancer said they could not obtain health coverage, and 6 percent said they lost their coverage because of being diagnosed with the disease (USA Today, Kaiser Family Foundation, and Harvard School of Public Health 2006). And the problem affects not only people with serious medical conditions, but also young and healthy people with relatively minor conditions such as allergies or asthma.

### System-Wide Evidence of Inefficient Spending

While an extensive literature in economic theory makes the case for market failure in the provision of health insurance, a substantial body of evidence documents the pervasiveness of inefficient allocation of spending and resources throughout the health care system. Evidence that health care spending may be inefficient comes from analyses of the relationship between health care spending and health outcomes, both across states in our own Nation and across countries around the world.

Within the United States, research suggests that the substantially higher rates of health care utilization in some geographic areas are not

associated with better health outcomes, even after accounting for differences in medical care prices, patient demographics, and regional rates of illness (Wennberg, Fisher, and Skinner 2002). Evidence from Medicare reveals that spending per enrollee varies widely across regions, without being clearly linked to differences in either medical needs or outcomes. One comparison of composite quality scores for medical centers and average spending per Medicare beneficiary found that facilities in states with low average costs are as likely or even more likely to provide recommended care for some common health problems than are similar facilities in states with high costs (Congressional Budget Office 2008). One study suggests that nearly 30 percent of Medicare's costs could be saved if Medicare per capita spending in all regions were equal to that in the lowest-cost areas (Wennberg, Fisher, and Skinner 2002).

Variations in spending tend to be more dramatic in cases where medical experts are uncertain about the best kind of treatment to administer. For instance, in the absence of medical consensus over the best use of imaging and diagnostic testing for heart attacks, use rates vary widely geographically, leading to corresponding variation in health spending. Research that helps medical providers understand and use the most effective treatment can help reduce this uncertainty, lower costs, and improve health outcomes.

Overuse of "supply-sensitive services," such as specialist care, diagnostic tests, and admissions to intensive care facilities among patients with chronic illnesses, as well as differences in social norms among local physicians, seems to drive up per capita spending in high-cost areas (Congressional Budget Office 2008). Moral hazard may help to explain some of the overuse of services that do not improve people's health status.

Health care spending also differs as a share of GDP across countries, without corresponding systematic differences in outcomes. For example, according to the United Nations, the estimated U.S. infant mortality rate of 6.3 per 1,000 infants for the 2005 to 2010 period is projected to be substantially higher than that in any other Group of Seven (G-7) country, as is the mortality rate among children under the age of five, as shown in Figure 7-3 (United Nations 2007). This variation is especially striking when one considers that the United States has the highest GDP per capita of any G-7 country. Although drawing direct conclusions from cross-country comparisons is difficult because of underlying health differences, this comparison further suggests that the United States could lower health care spending without sacrificing quality. Similarly, life expectancy is much lower in the United States than in other advanced economies. The OECD estimated life expectancy at birth in 2006 to be 78.1 years in the United States

compared with an average of 80.7 in other G-7 countries (Organisation for Economic Co-operation and Development 2009).

Deaths per 1,000 live births Infant mortality 7.8 8 Under-five mortality 7 6.3 6.1 5.9 6 5.4 5.2 5.0 4.8 5 4.2 4 3 2 1 Canada France Germany Italy Japan United United Kingdom States

Figure 7-3 Child and Infant Mortality Across G-7 Countries

Source: United Nations (2007).

Recent research suggests that differences in health care systems account for at least part of these cross-country differences in life expectancy. For example, one study (Nolte and McKee 2008) analyzed mortality from causes that could be prevented by effective health care, which the authors term "amenable mortality." They found that the amenable mortality rate among men in the United States in 1997-98 was 8 percent higher than the average rate in 18 other industrialized countries. The corresponding rate among U.S. women was 17 percent higher than the average among these other 18 countries. Moreover, of all 19 countries considered, the United States had the smallest decline during the subsequent five years, with a decline of just 4 percent compared with an average decline of 16 percent across the remaining 18. The authors further estimated that if the U.S. improvement had been equal to the average improvement for the other countries, the number of preventable deaths in the United States would have been 75,000 lower in 2002. This finding suggests that the U.S. health care system has been improving much less rapidly than the systems in other industrialized countries in recent years.

A further indication that our health care system is in need of reform is that satisfaction with care has, if anything, been declining despite the substantial increases in spending. Not surprisingly, this decline in satisfaction has been concentrated among people without health insurance, whose ranks have swelled considerably during the past decade. For example, from 2000 to 2009, the fraction of uninsured U.S. residents reporting that they were satisfied with their health care fell from 36 to 26 percent. And not only has dissatisfaction with our health care system increased over time, it is also noticeably greater than dissatisfaction with systems in many other developed nations (Commonwealth Fund 2008).

#### Declining Coverage and Strains on Particular Groups and Sectors

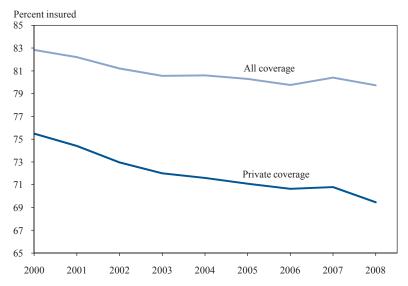
The preceding analysis shows that at an aggregate level, there are major inefficiencies in the current health care system. But, because of the nature of the market failures in health care, the current system works particularly poorly in certain parts of the economy and places disproportionate burdens on certain groups. Moreover, because of rising costs, many of the strains are increasing over time.

**Declining Coverage among Non-Elderly Adults.** The rapid increase in health insurance premiums in recent years has caused many firms to stop offering health insurance to their workers, forcing employees either to pay higher prices for coverage in the individual market (which is often much less generous than coverage in the group market) or to go without health insurance entirely. According to the Kaiser Family Foundation, between 2000 and 2009, the share of firms offering health insurance to their workers fell from 69 to 60 percent. Furthermore, 8 percent of firms offering coverage in 2009 reported that they were somewhat or very likely to drop coverage in 2010.

Largely because of these falling offer rates, private health insurance coverage declined substantially during this same period. As shown in Figure 7-4, the fraction of non-elderly adults in the United States with private health insurance coverage fell from 75.5 percent in 2000 to 69.5 percent in 2008.

These numbers, however, provide just a snapshot of health insurance coverage in the United States because they measure the fraction of people who are uninsured at a point in time and thus obscure the fact that a large fraction of the population has been uninsured at some point in the past. According to recent research, at least 48 percent of non-elderly Americans were uninsured at some point between 1996 and 2006 (Department of the Treasury 2009).

Figure 7-4
Insurance Rates of Non-Elderly Adults



Source: DeNavas-Walt, Proctor, and Smith (2009).

Although roughly half of the 2000–2008 decline in private coverage displayed in Figure 7-4 has been offset by an increase in public health insurance, the share of non-elderly adults without health insurance nevertheless rose from 17.2 to 20.3 percent. In other words, approximately 5.9 million more adults were uninsured in 2008 than would have been had the fraction uninsured remained constant since 2000. The decline in private health insurance coverage was similarly large among children, although it was more than offset by increases in public health insurance (most notably Medicaid and CHIP), so that less than 10 percent of children were uninsured by 2008 (DeNavas-Walt, Proctor, and Smith 2009).

The generosity of private health insurance coverage has also been declining in recent years. For example, from 2006 to 2009, the fraction of covered workers enrolled in an employer-sponsored plan with a deductible of \$1,000 or greater for single coverage more than doubled, from 10 to 22 percent. The increase in deductibles was also striking among covered workers with family coverage. For example, during this same three-year period, the fraction of enrollees in preferred provider organizations with a deductible of \$2,000 or more increased from 8 to 17 percent. Similar increases in cost-sharing were apparent for visits with primary care physicians. The fraction of covered workers with a copayment of \$25 or more for an office visit with a primary care physician increased from 12 to 31 percent from 2004 to 2009. These rising costs in the private market

fall disproportionately on the near-elderly, who have higher medical costs but are not eligible for Medicare. A recent study found that the average family premium in the individual market in 2009 for those aged 60-64 was 93 percent higher than the average family premium for individuals aged 35-39 (America's Health Insurance Plans 2009).

Low Insurance Coverage among Young Adults and Low-Income Individuals. Figure 7-5 shows the relationship between age and the fraction of people without health insurance in 2008. One striking pattern is the sharp and substantial rise in this fraction as individuals enter adulthood. For example, the share of 20-year-olds without health insurance is more than twice that of 17-year-olds (28 percent compared with 12 percent).

Percent uninsured 35 30 25 20 15 10 5 0 17 21 25 29 33 37 41 45 49 53 57 61 65 69 Age

Figure 7-5 Percent of Americans Uninsured by Age

Source: Department of Commerce (Census Bureau), Current Population Survey, Annual Social and Economic Supplement.

Adverse selection is clearly a key source of this change. teenagers obtain insurance through their parents' employer-provided family policies, and so are in large pools. Many young adults, in contrast, do not have this coverage and are either jobless or work at jobs that do not offer health insurance; thus, they must either buy insurance on the individual market or go uninsured. As described above, health insurance coverage in the individual market can be very expensive because of adverse selection. Many young adults also have very low incomes, making the cost of coverage

prohibitively high for them. Furthermore, because they are, on average, in very good health, young adults may be more tolerant than other groups of the risks associated with being uninsured.

The burden of rising costs also falls differentially on low-income individuals, who find it more difficult each year to afford coverage through employer plans or the individual market. Indeed, as shown in Figure 7-6, low-income individuals are substantially more likely to be uninsured than their higher-income counterparts. As the figure shows, non-elderly individuals below the Federal poverty line (\$10,830 a year in income for an individual and \$22,050 for a family of four in 2009) were five times as likely to be uninsured as their counterparts above 400 percent of the poverty line in 2008. These low rates of insurance coverage increase insurance premiums for other Americans because of the "hidden tax" that arises from the financing of uncompensated care.

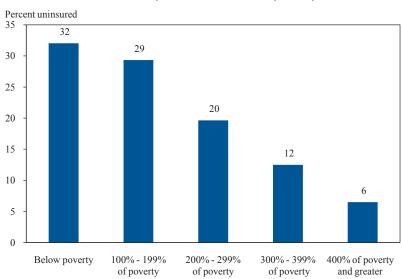


Figure 7-6 Share of Non-Elderly Individuals Uninsured by Poverty Status

Source: Department of Commerce (Census Bureau), Current Population Survey, Annual Social and Economic Supplement.

The Elderly. Even those over the age of 65 are not protected from high costs, despite almost universal coverage through Medicare. Consider prescription drug expenses, for which the majority of Medicare recipients have coverage through Medicare Part D. As shown in Figure 7-7, after the initial deductible of \$310, a standard Part D plan in 2010 covers 75 percent

of the cost of drugs only up to \$2,830 in annual prescription drug spending. After that, enrollees are responsible for all expenditures on prescriptions up to \$6,440 in total drug spending (where out-of-pocket costs would be \$4,550), at which point they qualify for catastrophic coverage with a modest copayment. Millions of beneficiaries fall into this coverage gap—termed the "donut hole"—every year, and as a result many may not be able to afford to fill needed prescriptions.

Beneficiary out-of-pocket spending, dollars 5,000 Catastrophic coverage 4,500 4,000 3,500 3.000 Coverage gap 2,500 2,000 \$310 deductible 1,500 Standard coverage 1,000 500 0 1,000 0 2,000 3,000 4,000 5.000 6,000 7,000 8.000 Total prescription drug spending, dollars

Figure 7-7
Medicare Part D Out-of-Pocket Costs by Total Prescription Drug Spending

Note: Calculations based on a standard 2010 benefit design.

Source: Medicare Payment Advisory Commission, Part D Payment System, October 2009.

In 2007, one-quarter of Part D enrollees who filled one or more prescriptions but did not receive low-income subsidies had prescription drug expenses that were high enough to reach the coverage gap. For that reason, 3.8 million Medicare recipients reached the initial coverage limit and were required to pay the full cost of additional pharmaceutical treatments received while in the coverage gap, despite having insurance for prescription drug costs. One study found that in 2007, 15 percent of Part D enrollees in the coverage gap using pharmaceuticals in one or more of eight major drug classes stopped taking their medication (Hoadley et al. 2008).

Small Businesses. As described earlier, adverse selection is a serious problem for small businesses, which do not have large numbers of workers to pool risks. This problem manifests itself in two forms. The first is high costs. Because of high broker fees and administrative costs as well as adverse selection, small firms pay up to 18 percent more per worker for the same policy than do large firms (Gabel et al. 2006). The second is low coverage. Employees at small businesses are almost three times as likely as their counterparts at large firms to be uninsured (29 percent versus 11 percent, according to the March 2009 Current Population Survey). And among small businesses that do offer insurance, only 22 percent of covered workers are offered a choice of more than one type of plan (Kaiser Family Foundation and Health Research and Educational Trust 2009).

In recent years, small businesses and their employees have had an especially difficult time managing the rapidly rising cost of health care. Consistent with this, the share of firms with three to nine employees offering health insurance to their workers fell from 57 to 46 percent between 2000 and 2009.

As discussed in a Council of Economic Advisers report issued in July 2009, high insurance costs in the small-group market discourage entrepreneurs from launching their own companies, and the low availability of insurance discourages many people from working at small firms (Council of Economic Advisers 2009c). As a result, the current system discourages entrepreneurship and hurts the competitiveness of existing small businesses. Given the key role of small businesses in job creation and growth, this harms the entire economy.

Taken together, the trends summarized in this section demonstrate that in recent years the rapid rise in health insurance premiums has reduced the take-home pay of American workers and eaten into increases in Medicare recipients' Social Security benefits. Fewer firms are electing to offer health insurance to their workers, and those that do are reducing the generosity of that coverage through increased cost-sharing. Fewer individuals each year can afford to purchase health insurance coverage. The current system places small businesses at a competitive disadvantage. And finally, the steady increases in health care spending strain the budgets of families, businesses, and governments at every level, and demonstrate the need for health insurance reform that slows the growth rate of costs.

## **HEALTH POLICIES ENACTED IN 2009**

Since taking office, the President has signed into law a series of provisions aimed at expanding health insurance coverage, improving the quality of care, and reducing the growth rate of health care spending. The

American Recovery and Reinvestment Act of 2009 provided vital support to those hit hardest by the economic downturn while helping to ensure access to doctors, nurses, and hospitals for Americans who lost jobs and income. At the same time, legislation extended health insurance coverage to millions of children, and improvements in health system quality and efficiency benefited the entire health care system. These necessary first steps have set the stage for a more fundamental reform of the U.S. health care system, one that will ensure access to affordable, high-quality coverage and that genuinely slows the growth rate of health care spending.

#### Expansion of the CHIP Program

Just two weeks after taking office, the President signed into law the Children's Health Insurance Program Reauthorization Act, which provides funding that expands access to nearly 4 million additional children by 2013. This guarantee of coverage also kept millions of children from losing insurance in the midst of the recession, when many workers lost employersponsored coverage for themselves and their dependents. An examination of data from recent surveys by the Centers for Disease Control and Prevention found that private coverage among children fell by 2.5 percentage points from the first six months of 2008 to the first six months of 2009. Despite the fall in private coverage, however, fewer children were uninsured during that six-month period in 2009, in large part because public coverage increased by 3 percentage points (Martinez and Cohen 2008, 2009).

Approximately 7 million children (1 in every 10) were uninsured in 2008 (DeNavas-Walt, Proctor, and Smith 2009). Once fully phased in, the CHIP reauthorization legislation signed by the President will lower that number by as much as half from the 2008 baseline. In the future, this new legislation will enhance the quality of medical care for children and improve their health. Research has convincingly shown that expanding health insurance to children is very cost-effective, because it not only increases access to care but also substantially lowers mortality (Currie and Gruber 1996a, 1996b).

## Subsidized COBRA Coverage

In part because of the difficulty of purchasing health insurance on the individual market (owing to adverse selection), most Americans get health insurance through their own or a family member's job. And what is true for dependent children is true for their parents: when economic conditions deteriorate, the number of people with employer-sponsored health insurance tends to fall. However, unlike the case with children, during the current recession public coverage has only offset part of the reduction in private health insurance coverage among adults. Thus, the fraction of adults without health insurance has increased. Figure 7-8 uses survey data from Gallup to show that from the third quarter of 2008 to the first quarter of 2009, the share of U.S. adults without health insurance rose by 1.7 percentage points, from 14.4 to 16.1 percent, representing an estimated increase of 4.0 million uninsured individuals.

Number uninsured (millions) Percent uninsured 17.0 38 16.5 37 16.0 36 15.5 35 15.0 34 14.5 33 14.0 32 2008:Q2 2008:Q3 2008:Q4 2009:O1

Figure 7-8 Share Uninsured among Adults Aged 18 and Over

Source: Gallup-Healthways Well-Being Index, January 2010.

When workers at large firms lose their jobs, COBRA provisions give them the right to continue existing coverage for themselves and their families. However, they are often required to pay the full premium cost with no assistance from former employers and without favorable tax treatment of their insurance benefits. Thus, although a large fraction of workers who lose their jobs can still purchase health insurance through COBRA at group rates, many elect not to do so, likely because the coverage is not affordable to a family with a newly laid-off wage earner.

One provision of the American Recovery and Reinvestment Act addressed the recession-induced drop in employer-sponsored health insurance by subsidizing COBRA coverage so that individuals pay only 35 percent of their premium, with the Federal Government covering the remaining 65 percent. This large subsidy may partially explain why the growth in the share of American adults without health insurance slowed dramatically from

the first to the fourth quarter of 2009, even while the unemployment rate continued to rise. While the average rate of uninsurance in 2009 was still 1.4 percentage points higher than the average in 2008, the rate was fairly constant throughout 2009. Thus, while the CHIP expansion was providing stable coverage to millions of children who would otherwise have lost it, the COBRA subsidy was further reinforcing access to coverage for working parents and families who faced unemployment.

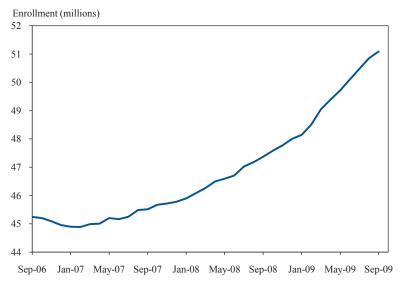
#### Temporary Federal Medical Assistance Percentage (FMAP) Increase

Historically, declines in employer-sponsored health insurance have led to increases in the number of people who qualify for public health insurance through programs such as Medicaid, which insured 45.8 million U.S. residents in December 2007. Because almost half of all Medicaid spending is typically financed by state governments, state Medicaid spending tends to rise substantially when economic conditions deteriorate. Coupled with the recession-induced drop in state tax revenues, these increases in Medicaid enrollment place a considerable strain on state budgets. And because virtually every state is required to balance its budget each year, increases in Medicaid enrollment often leave states with little choice but to raise taxes, lay off employees, reduce spending on public safety, education, and other important priorities, or reduce Medicaid benefits, provider payments, or eligibility. These policies are especially problematic when the economy is in severe recession, because they can stifle economic recovery.

Figure 7-9 uses administrative data from all 50 states and the District of Columbia to contrast the growth in Medicaid enrollment in the months leading up to the start of the recession in December 2007 with the corresponding growth during the recession.<sup>2</sup> An examination of the data displayed in the figure reveals that, after growing from 45.2 million in September 2006 to 45.8 million in December 2007, the number of Medicaid recipients increased much more rapidly in the subsequent 21 months, and stood at 51.1 million in September 2009. This represents an increase of 253,000 Medicaid recipients per month during the recession, versus an average increase of just 36,000 per month in the preceding 15 months.

<sup>&</sup>lt;sup>2</sup> Data on state Medicaid enrollment were derived from direct communication between the Council of Economic Advisers and state health departments in 50 states and the District of Columbia. Monthly enrollment from September 2006 through September 2009 was reported by all states with the exception of Vermont in the first 10 months considered. For each month from September 2006 through June 2007 in Vermont, the state's July 2007 Medicaid enrollment was used.

Figure 7-9
Monthly Medicaid Enrollment Across the States



Source: Information from individual state health departments, compiled by CEA.

To help states pay for an expanding Medicaid program without raising taxes or cutting key services, one important component of the Recovery Act was a temporary increase in each state's Federal Medical Assistance Percentage (FMAP), the share of Medicaid spending paid by the Federal Government. This fiscal relief allowed states to avoid cutbacks to their Medicaid programs or other adjustments that would have exacerbated the effects of the recession. The increased FMAPs were larger for states where unemployment increased the most, because their financial strains were greatest. To qualify for the increased FMAPs, states were required to maintain Medicaid eligibility at pre-recession levels.

A recent report by the Kaiser Family Foundation confirms that support from the Recovery Act—as well as the expansion of coverage for children enacted several weeks earlier in February 2009—was essential to preserving the ability of states to offer health insurance coverage to those most in need. In fact, more than half the states expanded access to health insurance coverage for low-income children, parents, and pregnant women in Medicaid and CHIP in 2009 (Ross and Jarlenski 2009).

#### Recovery Act Measures to Improve the Quality and Efficiency of Health Care

Beyond supporting jobless workers and their families in the midst of the recession, the Recovery Act addressed structural weaknesses in the health care system by investing in its infrastructure and its workforce. These investments will help to build a health care system with lower costs and better health outcomes for the long term.

For example, the Recovery Act invested \$2 billion in health centers for new construction, renovation of existing facilities, and expansion of coverage. An additional \$500 million was allocated to bolster the primary care workforce to improve access to primary care in underserved areas. The Act provided a further \$1 billion in funding for public health activities to improve prevention and to incentivize wellness initiatives for those with chronic illness; both measures are aimed at improving the quality of care and ultimately bringing down costs. The Act also increased spending on comparative effectiveness research by \$1.1 billion, to give doctors and patients access to the most credible and up-to-date information about which treatments are likely to work best.

One final component of the Recovery Act was the Health Information Technology for Economic and Clinical Health Act, which expanded the adoption and use of health information technology through infrastructure formation, information security improvements, and incentives for adoption and meaningful use of certified health information technology. This investment in developing computerized medical records will reduce health care spending and improve quality while securing patients' confidential information.

These investments build a foundation for comprehensive health insurance reform by adding to the ranks of doctors, nurses, and other health care providers, especially in critical fields like primary care, and in areas of the country with the greatest need for a more robust medical workforce. Moreover, the investments in comparative effectiveness research and health information technology will make it much easier for information and quality improvements to spread rapidly between doctors, medical practices, and hospitals across the public and private sectors. When combined with the wide range of delivery system changes included in health insurance reform legislation, these investments are expected to contain costs and improve quality over the long run.

In summary, legislation passed in 2009 helped extend or continue health insurance coverage for the workers, families, and children affected by the current recession. Rather than focusing solely on today's crisis, the legislation lays the groundwork for a reformed health care system that addresses the weaknesses, flaws, and inefficiencies of the status quo.

#### 2009 HEALTH REFORM LEGISLATION

As this *Report* goes to press, Congress has come closer to passing comprehensive health insurance reform than ever before, with major bills having passed both the House and the Senate. As of this writing, whether those bills will lead to enactment of final legislation in the near future is uncertain. Nonetheless, the bills contain important features that would expand coverage, slow the growth rate of costs while improving the quality of care, and benefit individuals, businesses, and governments at every level. This section discusses the major features of the two bills—the House's Affordable Health Care for America Act and the Senate's Patient Protection and Affordable Care Act.

# Insurance Market Reforms: Strengthening and Securing Coverage

Both the House and the Senate bills contain important features that would immediately expand coverage and increase access to preventive care. The legislation would also strengthen regulation of the health insurance market, improve consumer protections, and secure coverage for more than 30 million Americans. These regulations would correct insurance market failures by preventing health insurers from responding to adverse selection by raising rates and denying coverage, thus stabilizing risk pools to secure access to affordable coverage.

Both versions of the legislation provide immediate Federal support for a new program to provide coverage to uninsured Americans with preexisting conditions. Combined with strong new consumer protections, these measures would ensure that millions of Americans can immediately purchase coverage at more affordable prices despite their personal medical history or health risks. Health insurance reform also makes immediate investments in community health centers, which would improve access to coverage among the most vulnerable populations. Both the House and Senate versions of reform immediately create reinsurance programs for employer health plans, providing coverage for early retirees to prevent them from becoming uninsured before they are covered by Medicare. Additionally, reform legislation would immediately begin to reform delivery systems for health care and improve transparency and choice for consumers. For example, the Senate proposal would create a website that would help

consumers compare coverage options by summarizing important aspects of each insurance contract in a consistent and easy-to-understand format.

New laws would help cover millions of young adults as they transition into the workforce by requiring insurers to allow extended family coverage for dependents through their mid-20s. The CBO and the Joint Committee on Taxation estimate that this requirement would lower average premiums per person in the large-group market by increasing the number of relatively healthy low-cost people in large-group pools (Congressional Budget Office 2009a).

In the years following reform, legislation would put into place strong new consumer protections to prevent denials of coverage or excessive costs for the less healthy. Insurers would be required to renew any policy for which the premium has been paid in full. Insurers could not refuse to renew because someone became sick, nor could they drop or water down insurance coverage for those who are or become ill. To prevent insurers from charging excessively high rates to the less healthy, reform legislation would also enact adjusted community rating rules for premiums.

Banning such treatment of individuals with preexisting conditions would not only allow insurance markets to better help individuals hedge against the risk of health care costs, but may also make the U.S. labor market more efficient. Without such protections, adults with preexisting conditions may be reluctant to change insurance providers and expose themselves to increased premiums. Workers who receive health insurance through their employers may therefore be less willing to change jobs, creating "job lock" that discourages desirable adjustments in the labor market.

In both versions of reform legislation, these provisions are linked with incentives for individuals to obtain coverage and for firms to insure their workers. While preventing insurance companies from discriminating based on preexisting conditions will help some of the neediest members of our society, in isolation these reforms could increase costs for individuals without preexisting conditions, potentially aggravating adverse selection. Without a responsibility to maintain health insurance coverage, individuals could forgo purchasing coverage until they fell ill, and thus not contribute to a shared insurance risk pool until their expected costs rose sharply. However, with restrictions on exclusions for preexisting conditions in place, high-cost individuals who sign up after falling ill could obtain coverage at low premiums. Thus, individuals who had contributed toward coverage would be faced with higher costs, potentially driving even more individuals out of coverage. To prevent a spiral of increasing costs and decreasing insurance rates resulting from adverse selection, both the House and the Senate bills establish a principle of joint individual and employer responsibility to

obtain and provide insurance, and would provide subsidies and tax credits that would assist in this process.

The bills would address other features of many health plans that limit their ability to help individuals insure against financial risk. Currently, insurers can put yearly and lifetime limits on coverage. For people with diseases such as cancer, life-saving treatment is often very costly, and exceeding annual and lifetime benefit limits can lead to bankruptcy. This problem is especially severe in the individual and small-group markets, where insurers have more discretion in designing policies. Insurance plans that allow individuals to bankrupt themselves may be socially inefficient because of the Samaritan's dilemma: medical bills that are unpaid when a patient becomes bankrupt impose a hidden tax on other participants in the health care market.

In addition to these insurance market reforms, legislation passed by Congress would require coverage of preventive care and exempt preventive care benefits from deductibles and other cost-sharing requirements in Medicare and private insurance. Evidence suggests that not only are certain preventive care measures cost-effective, but they can also help to prevent diseases that are responsible for roughly half of yearly mortality in the United States (Mokdad et al. 2004). Some measures, such as smoking cessation programs, discussing aspirin use with high-risk adults, and childhood immunizations, may even lower total health care spending (Maciosek et al. 2006). Because many people change insurance companies several times over the course of their lives, insurance companies may underinvest in preventive care that is cost-effective but does not reduce medical costs until far in the future. By encouraging all insurance companies to invest in preventive care, health insurance reform would increase the efficiency of the health care sector.

Finally, reform legislation takes steps to make prescription drug coverage more affordable and secure for senior citizens. The legislation would increase the initial coverage limit under Medicare Part D by \$500 in 2010 and also provide 50 percent price discounts for brand-name drugs in the "donut hole" discussed earlier. This discount would allow many Medicare Part D recipients to reduce their out-of-pocket spending on prescription drugs. Not only would fewer beneficiaries have to pay the full cost of their prescription drugs while in the donut hole, but those who do reach this coverage gap would also benefit from increased coverage before reaching that point.

In summary, within the first few years after passage, reform legislation in Congress would guarantee coverage for those with preexisting conditions, reform private insurance markets with strong consumer protections that

would stabilize risk pools and mitigate adverse selection, and strengthen public coverage under Medicare.

#### Expansions in Health Insurance Coverage Through the Exchange

Central to both the House and the Senate bills is the health insurance exchange, which would allow individuals and employees of small businesses to choose among many different insurance plans. The exchange would provide a centralized marketplace to allow individuals, families, and small firms to pool together and purchase coverage much like larger firms do today, improving consumer choice and increasing pressure on insurers to offer lower prices and more generous benefits to attract customers. In its first year of operation, the exchange would be open to qualified individuals and small businesses.

Individuals and small businesses, which might otherwise purchase health insurance in the individual or small-group markets, would benefit from the economies of scale and greater buying leverage in the exchange, which could result in much lower premiums. The exchange would also provide transparent information on plan quality, out-of-pocket costs, covered benefits, and premiums for each offered plan, enabling individuals to select the plan that best fits their and their family's needs. The availability of easy-to-compare premium information would provide a powerful incentive for health insurers to price competitively, thus making coverage more affordable for participants in the exchange.

The new exchange would be especially beneficial for small business employees, who, as described earlier, face particularly severe challenges in the health insurance market. The bills would enable small businesses that meet certain criteria to purchase insurance through the exchange, allowing them and their workers to buy better coverage at lower costs. Moreover, many small businesses that provide health insurance for their employees would receive a tax credit to alleviate their disproportionately higher costs and to encourage coverage. The tax credit would lower the cost of coverage by as much as 50 percent. Reform would make it easier for small businesses to recruit talented workers and would also increase workers' incentives to start their own small businesses. A recent analysis of the Senate bill by the CBO found that premiums for a given amount of coverage for the same set of people or small businesses would fall in the individual and small-group markets as a result of reductions in administrative costs and increased competition in a centralized marketplace (Congressional Budget Office 2009a).

Most individuals who select a plan in the exchange would be eligible for subsidies that reduce the cost of their coverage. In both the House and Senate bills, subsidies would be available to certain individuals and families with incomes below 400 percent of the Federal poverty line. The premium and out-of-pocket spending subsidies for plans purchased in the exchange would be larger for lower-income families, many of whom cannot afford the cost of a private plan. In addition, individuals with incomes below about 133 to 150 percent of the poverty line would be eligible for health insurance through the Medicaid program.

In the exchange, Federal subsidies would be tied to premiums for relatively lower-cost "reference" plans. Beneficiaries would, however, be able to buy more extensive coverage at an additional, unsubsidized cost.

### Economic and Health Benefits of Expanding Health Insurance Coverage

CBO analyses of both the House and Senate bills indicate that, in part because of the creation of the exchanges and the expansion in Medicaid, more than 30 million Americans who would otherwise be uninsured would obtain coverage as a result of reform. These coverage expansions would improve not only the health and the economic well-being of affected individuals and families, but also the broader economy.

A comprehensive body of literature demonstrates that being uninsured leads to poorer medical treatment, worse health status, and higher mortality rates. Across a range of acute conditions and chronic diseases, uninsured Americans have worse outcomes, higher rates of preventable death, and lower-quality care. Additionally, being uninsured imposes on families a significant financial risk of bankruptcy caused by medical expenses.

Evidence from the state of Massachusetts—which expanded health insurance to all but 2.6 percent of its population in a 2006 reform effort—finds that expanding coverage increased regular medical care and lowered financial burdens for residents who gained coverage. Only 17.4 percent of adults with family incomes of less than 300 percent of the Federal poverty line reported forgoing care because of costs in 2008, compared with 27.3 percent in the pre-reform baseline in 2006 (Long and Masi 2009).

Taken together, this evidence strongly suggests that expanding coverage for Americans through health insurance reform would directly benefit millions of families by giving them access to the care they need to maintain their health without substantial financial burdens and risks. Moreover, because of the fixed costs of developing health care infrastructure such as trauma centers, increasing the share of people with health insurance can improve health outcomes for people with insurance as well.

Beyond the improvements for individuals and families, coverage expansions would produce benefits that extend throughout A CEA report in June 2009 estimated that the entire economy. economic gains from reduced financial risk for the uninsured totaled \$40 billion per year (Council of Economic Advisers 2009a). Moreover, the CEA report found an economic value of more than \$180 billion per year from averting preventable deaths caused by a lack of insurance. Taken together, these gains would far exceed the cost of extending coverage to the currently uninsured population.

The economic benefits of expanding coverage would extend to labor markets in the form of reduced absenteeism and greater productivity. According to the 2009 March Current Population Survey, 18.7 million nonelderly adults report having one or more disabilities that prevent or limit the work they can perform; of that total, 3.1 million lack health insurance. Approximately 50 percent of non-elderly adults who work report having at least one serious medical condition. Previous research has documented the indirect costs to employers of health-related productivity losses. Some of the costliest conditions—depression, migraines, and asthma—can often be effectively managed with prescription medications made more affordable by health insurance. This suggests that expanding access to coverage would improve productivity and labor supply by creating a healthier workforce that would lose fewer hours to preventable illnesses or disabilities.

#### Reducing the Growth Rate of Health Care Costs in the Public and **Private Sectors**

The House and Senate bills contain a number of provisions that would reduce the growth rate of health care spending in both the public and private sectors. Both bills create pilot programs in Medicare to bundle provider payments for an episode of care rather than for individual procedures. Under bundled payments, Medicare would provide a single reimbursement for an entire episode of care rather than multiple reimbursements for individual treatments. This payment strategy would give providers, organized around a hospital or group of physicians, a stronger incentive to coordinate and provide quality care efficiently rather than carry out lowvalue or unnecessary treatments and procedures. Recent research in the New England Journal of Medicine suggests that bundled payments could improve quality and substantially reduce health care spending (Hussey et al. 2009). The Department of Health and Human Services would be given authority to expand or extend successful pilot programs without additional legislative action.

Both bills also include measures that directly reduce waste in the current health care system. One example of such waste is the substantial overpayment to Medicare Advantage plans, which are currently paid an average of 14 percent more per recipient than traditional Medicare. The reform bills would reduce these overpayments, saving more than \$100 billion between 2010 and 2019 (Congressional Budget Office 2009b). Reducing the overpayments would also lower Medicare recipients' Part B premiums below what they otherwise would be and would extend the solvency of the Medicare Trust Fund.

Another component of the legislation that has the potential to slow the growth rate of health care spending is the Independent Payment Advisory Board included in the Senate bill. This board would have the authority to propose changes to the Medicare program both to improve the quality of care and to reduce the growth rate of program spending. Absent Congressional action, these recommendations would be automatically implemented.

Using the the CEA analysis of the House and Senate bills along with projections from CBO about the level of Federal spending on Medicare, Medicaid, and CHIP, it is possible to estimate the effect of reform on the growth rate of Federal health care spending. Recent CEA analyses of the House and Senate bills find that reform would lower total Federal spending on Medicare, Medicaid, and CHIP by 2019 below what it otherwise would have been (Council of Economic Advisers 2009b). Moreover, between 2016 and 2019, both bills would lower the annual growth rate of Federal spending on these programs by approximately 1.0 percentage point. State and local governments would also benefit financially from health insurance reform, as described in Box 7-1.

#### Box 7-1: The Impact of Health Reform on State and Local Governments

Although slowing the growth in health care costs will help the long-run fiscal situation of the Federal Government, some observers worry about how reform will affect state and local governments. To help ensure that virtually all Americans receive health insurance, both the Senate and the House bills call for expanding Medicaid eligibility. Because Medicaid is partly funded by states, some state officials fear that the state fiscal situation will deteriorate as a consequence of reform.

As documented by a CEA report published in September (Council of Economic Advisers 2009d), however, health insurance reform would

Continued on next page

#### Box 7-1, continued

improve the fiscal health of state and local governments in at least three important ways. First, state and local governments are already spending billions of dollars each year providing coverage to the uninsured; these costs would fall significantly as a consequence of health reform. Second, encouraging all individuals to become insured would reduce the hidden tax paid by providers of health insurance. Because state and local governments employ more than 19 million people, the total savings from removing the hidden tax is likely to be substantial. Third, an excise tax on high-cost plans would boost workers' wages by billions of dollars each year and thus increase state income tax revenues.

To understand the net consequences of reform for the fiscal health of state and local governments, the CEA studied the impact of reform for 16 states that are diverse along many important dimensions: geographic, economic, and demographic. For every state studied, health reform would result in substantial savings for state and local governments.

In addition to these public savings, the reform proposals would reduce the growth of health care costs in the private sector. One important mechanism through which reform could reduce these costs is the excise tax on high-cost insurance plans included in the Senate bill. Under current tax law, employer compensation in the form of wages is subject to the income tax, while compensation in the form of employer-provided health care benefits is not. Individuals may therefore have an incentive to obtain more generous health insurance than they would if wages and health insurance faced more equal tax treatment. Absent other incentives for individuals to obtain insurance, the preferential tax treatment of health insurance may be beneficial, because it encourages firms to provide health insurance to their workers and facilitates pooling. Nonetheless, placing no limit on this subsidy likely leads to health insurance that is more generous than would be efficient in some cases.

To help contain the growth in the cost of these plans without jeopardizing the risk-pooling benefits, the Senate bill would impose a tax on only the most expensive employer-sponsored plans. Although only a small share of plans would be affected, CEA estimates based on data from the CBO suggest that the excise tax on high-cost insurance plans would reduce the growth rate of annual health care costs in the private sector by 0.5 percentage point per year from 2012 to 2018. The excise tax would encourage workers and their firms' human resources departments to be more watchful consumers and would give insurers a powerful incentive to

price competitively. And to the extent that bundling, accountable care organizations, and other delivery system reforms in both the House and Senate bills would spill over to the private sector, it is likely that the rate of growth of health care spending in the private sector would fall by considerably more than 0.5 percentage point per year. Lower increases in private health insurance premiums would lead to substantially higher take-home earnings for workers.

Reform would also reduce private spending on health care in other important ways. As noted, encouraging all individuals to obtain health insurance would likely reduce average costs for people who are insured. Reducing the hidden tax on health insurance premiums imposed by uncompensated care for the uninsured, for example, would reduce the financial burden not only on state and local governments, but also on individuals. CBO estimates of the Senate legislation find that reform has the power to reduce small-group premiums by up to 2 percent and even large-group premiums by up to 3 percent. And according to research by the Business Roundtable, reforms similar to those included in both the House and Senate bills could reduce employer-sponsored health insurance costs for family coverage by as much as \$3,000 per worker by 2019 relative to what those costs otherwise would have been.

## The Economic Benefits of Slowing the Growth Rate of Health Care Costs

Reform as envisioned in both the House and Senate bills passed in late 2009 would substantially lower the growth rate of health care spending. Of course, spending would increase in the very short run as coverage was extended to more than 30 million Americans who would otherwise be uninsured. But, according to the CBO, these temporary increases would soon be more than offset by the slowdown in the growth rate of spending, with the net savings increasing over time (Congressional Budget Office 2009b, 2009c).

A report released by the CEA in June 2009 demonstrated that slowing the growth rate of health care costs would raise U.S. standards of living by freeing up resources that could be used to produce other goods and services. An examination of the cost reduction measures contained in the Senate bill suggests that the typical family would see its income increase by thousands of dollars per year by 2030. Total GDP would be substantially higher as well, driven upward by both increased efficiency and increased national saving.

Slowing the growth rate of health care costs would also lower the Federal budget deficit. Projections by the CBO of both the House and the Senate legislation suggest that the bills would lower the deficit substantially

in the upcoming decade, and even more in the next decade. These savings would obviate large tax increases or cuts in other important priority areas. As discussed in Chapter 5, it would be the single most important step toward addressing the Nation's long-run fiscal challenges.

Finally, reform that genuinely slows the growth of health care costs could increase employment for a period of time by lowering the unemployment rate that is consistent with steady inflation. These effects could be important, with CEA estimates suggesting an increase of more than 300,000 jobs for a period of time if health care costs grew by 1 percentage point less each vear.

#### Conclusion

In recent years, health care costs in the Nation's private and public sectors have been rising at an unsustainable rate, and the fraction of Americans who are uninsured has steadily increased. These trends have imposed tremendous burdens on individuals, employers, and governments at every level, and the problems have grown yet more severe during the past two years with the onset of the worst recession since the Great Depression.

Last year, the President signed into law several policies that have cushioned the worst of the economic downturn, including an expansion in the Children's Health Insurance Program and an extension of COBRA coverage for displaced workers and their families. Other policies, such as increased funding for health information technology, will improve the long-run efficiency and quality of the health care sector.

Legislation passed by both the House and the Senate in late 2009 would expand health insurance coverage to tens of millions of Americans while slowing the growth rate of health care costs. These reforms would improve the health and the economic well-being of individuals and families, help small businesses, stimulate job creation, and ease strains on Federal, state, and local governments imposed by rapidly rising health care costs.



## C H A P T E R 8

# STRENGTHENING THE AMERICAN LABOR FORCE

The recession has been extremely difficult for American workers and families. One in ten workers is now unemployed, wages and hours worked have fallen, and many families are struggling to make ends meet. Making matters worse, the recession followed a sustained period of rising inequality and stagnation in the living standards of typical American workers. A central challenge in coming years will be to smooth the transition to a sustainable growth path with more widely shared prosperity.

As we begin to recover from the recession, we will see a new and much-changed labor market. Some industries that grew unsustainably large in recent years, such as construction and finance, will recover but will not immediately return to past employment levels. The same may be true for traditional manufacturing, which has been shrinking as a share of the economy for decades. The pace of employment decline will surely moderate after the recession, but many former workers in traditional manufacturing will need to transition into new, growing sectors.

In the place of the declining industries will come new opportunities for American workers. Health care will remain an important source of growth in the labor market, as will high-technology sectors including clean energy industries and advanced manufacturing. Well-trained and highly skilled workers will be best positioned to secure good jobs in these new and growing sectors. The best way to prepare our workforce for the challenges and opportunities that lie ahead is by strengthening our education system, creating a seamless, efficient path for every American from childhood to entry into the labor market as a skilled worker ready to meet the needs of the new labor market.

Both individuals and the economy as a whole benefit from increased educational attainment and improved school quality. A focus on access, equity, and quality for all American students, from early childhood through high school and into postsecondary education and training throughout

workers' careers, will help ensure that the benefits of economic growth are widely shared.

#### CHALLENGES FACING AMERICAN WORKERS

The last few years have been a challenging time for American workers, with the high unemployment of the current recession compounding longer-run trends toward increased insecurity and inequality.

# Unemployment

As of December 2009, the unemployment rate was 10.0 percent, a rate that has been exceeded only once since the Great Depression. As high as it is, however, this rate understates just how weak the labor market is. Many Americans who would like to work have given up hope of finding a job and have dropped out of the labor force; others who would like full-time jobs have settled for part-time work. Figure 8-1 shows both the conventional unemployment rate and a broader measure of labor underutilization that includes not just unemployed workers but also those who would like jobs

Percent, seasonally adjusted 16 12 Broad unemployment and underemployment rate Overall unemployment 8 4 1979 1984 1989 1994 1999 2004 2009

Figure 8-1 Unemployment and Underemployment Rates

Notes: Grey shading indicates recessions. The overall unemployment rate represents the share of the labor force that is unemployed (those actively looking for work). The broad unemployment rate is a variant of the overall unemployment rate that adds marginally attached workers (those not actively looking for a job, but want one and have looked for one recently) as well as workers employed part-time for economic reasons to the numerator (the "unemployed"), and adds marginally attached workers to the denominator (the "labor force").

Source: Department of Labor (Bureau of Labor Statistics), Employment Situation Table A-12, Series U-3 and U-6.

but have given up looking for work and those who are employed part-time for economic reasons. This measure indicates that more than one in six potential workers are unemployed or underemployed. Another measure of labor market conditions that accounts for those who have given up looking for work is the employment-to-population ratio. In December, fewer than six in ten adults were employed, the lowest ratio since 1983. A final useful labor market indicator is the number of long-term unemployed—those without jobs for 27 weeks or more. More than one-third of unemployed Americans have been seeking work for more than 26 weeks, the highest share since the series began in 1948.

The employment situation is even worse for members of racial and ethnic minorities. Figure 8-2 shows the unemployment rate for whites, blacks, Hispanics, and Asians. While the unemployment rate for whites topped out at 9.4 percent in October 2009 and has declined slightly since then, the rate for blacks exceeds 16 percent and has continued to rise, while that for Hispanics is nearly 13 percent. The disproportionate impact of the current recession on blacks and Hispanics mirrors that seen in past business cycles. It is critical that all Americans be able to participate fully and equally in our economic recovery.



Figure 8-2 Unemployment Rates by Race

Notes: Grey shading indicates recessions. Hispanics may be of any race. Respondents with multiple races are excluded from the white, black, and Asian categories. Series for whites, blacks, and Hispanics are seasonally adjusted. Asian series is not seasonally adjusted and is not available before 2000.

Source: Department of Labor (Bureau of Labor Statistics), Employment Situation Table A-2.

Even a quick return to job growth will not immediately eliminate employment problems, as it will take time to create the millions of new jobs needed to return to normal employment levels. Many workers will have difficulty finding work for some time to come. Extended periods of high unemployment and low job creation rates mean that many displaced workers will exhaust their unemployment insurance benefits before jobs become available in large numbers. After months or even years of unemployment, most who exhaust their benefits will likely have used up whatever savings they had when they lost their jobs. Many will be forced to turn to public assistance—Temporary Assistance for Needy Families, Supplemental Nutritional Assistance (formerly known as food stamps), or other similar programs—to make ends meet.

Sustained periods of low labor demand also have negative repercussions for the long-run health of the economy. Mounting evidence indicates that displacement during bad economic times leads to long-run reductions in workers' productivity (Jacobson, LaLonde, and Sullivan 1993), likely because the displaced workers lose job skills, fall out of habits needed for successful employment, and have trouble convincing employers that they will be good employees. The resulting loss of "human capital" reduces workers' earning power, even after the economy recovers.

Deep downturns have particularly large effects on young Americans. The unemployment rate for teenagers in December was 27.1 percent. Research shows that teens who first enter the labor market during a recession can have trouble getting their feet onto the first rung of the career ladder, leaving them a step or more behind throughout their lives (Kahn forthcoming; Oreopoulos, von Wachter, and Heisz 2006; Oyer 2006). There is also evidence that when parents lose their jobs, their children's long-run economic opportunities suffer (Oreopoulos, Page, and Stevens 2008).

# Sectoral Change

The Great Recession has aggravated an already challenging trend: sectoral shifts that are changing the nature of work. While most American workers were once engaged in producing food and manufactured goods, often through physical labor that did not require a great deal of training, the United States is increasingly a knowledge-based society where workers produce services using analytical skills. The changing economy offers tremendous opportunities for American workers in high technology, in the new clean energy economy, in health care, and in other high-skill fields.

Accompanying these shifts in the composition of employment have been changes in the institutions that govern the labor market. The prototypical American career once involved working for a single employer for many

years, backed by a union that bargained for steady wage increases and for a pension that promised a stable, guaranteed income in retirement. The labor market has changed. Fewer than one in seven workers belongs to a union, and most people can count on changing employers several times over their careers. Moreover, the vast majority of retirement plans are now "defined contribution," meaning that workers' retirement incomes depend on the success of their individual investment decisions and on the performance of asset markets as a whole. This shift has meant added risk for workers, particularly those whose planned retirements coincide with downturns in asset prices.

# Stagnating Incomes for Middle-Class Families

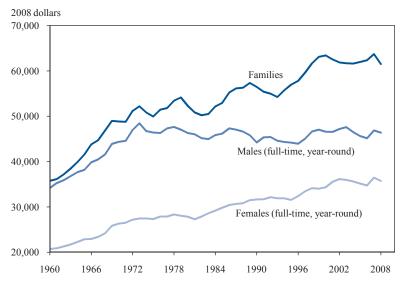
A final major challenge facing American workers is the decades-long stagnation in living standards for typical families and the related increase in inequality. Figure 8-3 offers two looks at income trends over the past half century. First, it shows real median family income—the level at which half of families have higher income and half have lower income—over time. The median rose steadily until 1970, but then the rate of growth slowed substantially, and since 2000, the median has actually fallen.

One determinant of family income is the number of individuals working outside of the home. Female labor force participation has risen dramatically: in 1960, just over 40 percent of adult women (aged 18-54) participated in the labor force; by 2000, approximately three-quarters did. This increase in female labor force participation contributed to the rise in family incomes. However, the female labor force participation rate has been roughly stable since 2000, and there are not likely to be future increases in participation as dramatic as those seen in the past. Further increases in family incomes will likely rely on growth in individual earnings.

The other two series in Figure 8-3 show the median earnings for men and women working full-time, year-round jobs. Real median female year-round earnings have grown steadily by about 1.1 percent per year on average since 1960, reflecting in part the gradual leveling of labor market barriers to women's career advancement. But real male earnings have been essentially flat since the early 1970s. One source of the stagnation of median male earnings and the reduced growth rate of median female earnings is that productivity growth slowed betwen 1973 and 1995 (Chapter 10). But this is not a complete explanation. Even at a reduced growth rate, American workers' productivity has more than doubled in the last 40 years.

A partial explanation for the divergence between productivity and earnings is the rapid rise in health care costs in recent years: an ever-greater share of the compensation paid by employers has gone toward health

Figure 8-3
Real Median Family Income and Median Individual Earnings



Notes: Family income measure is total money income excluding capital gains and before taxes. Median earnings series are for full-time, year-round workers; prior to 1989, only civilian workers are included. All series are deflated using CPI-U-RS. Sources: Department of Commerce (Census Bureau), Income, Poverty, and Health Insurance Coverage in the United States Table A-2; Current Population Survey, Annual Social and Economic Supplement, Historical Income Table F-12.

insurance premiums, which have risen much faster than inflation. This makes health reform an urgent priority. As discussed in Chapter 7, the proposals under consideration in Congress will slow the growth in health care costs, allowing American workers to realize more of the benefits of their hard work through increased take-home pay.

A second explanation is that per capita earnings are distributed in an increasingly unequal way, with ever-smaller shares going to workers in the middle and bottom of the distribution (Kopczuk, Saez, and Song forthcoming). Earnings inequality is compounded by inequality in nonlabor income, including dividends, interest, and capital gains. Figure 8-4 shows that in recent years nearly half of all income—including both wages and salaries and nonlabor income—has gone to 10 percent of families. The top 1 percent of families now receive nearly 25 percent of income, up from less than 10 percent in the 1970s (Piketty and Saez 2003). Today's income concentration is of a form not seen since the 1920s. Although there is nothing inherently wrong with high incomes at the top of the distribution, they are problematic if they come at the expense of the rest of workers. A major challenge for American public policy is to ensure that prosperity is again broadly shared.

Figure 8-4 Share of Pre-Tax Income Going to the Top 10 Percent of Families





Note: Includes capital gains.

Sources: Piketty and Saez (2003); recent data from http://elsa.berkeley.edu/~saez/TabFig2007.xls.

#### Policies to Support Workers

The Administration's first priority upon taking office was to strengthen the economy and the labor market, helping to provide jobs for those who need them. According to Council of Economic Advisers estimates, the American Recovery and Reinvestment Act of 2009 had created or saved between 1.5 million and 2 million jobs as of the fourth quarter of 2009 (Council of Economic Advisers 2010).

At the same time, the Administration has worked to strengthen the safety net for those who remain unemployed. The Recovery Act provided unprecedented support for the jobless, with increased benefits for every unemployment insurance recipient, the longest extension of unemployment benefits in history, an expansion of the Supplemental Nutrition Assistance Program, and assistance with health insurance premiums for those who have lost their jobs. These provisions have directly helped millions of outof-work Americans pay for housing, put food on the table, and maintain access to medical care. Moreover, because the unemployed are likely to spend any benefits they receive, these provisions have supported increased economic activity, strengthening the labor market and helping to create the job openings that will be needed to move people back into work. The safety net provisions in the Recovery Act are scheduled to expire at the end of February 2010, but because of the ongoing weakness in the labor market, the Administration is working with Congress to extend them further.

The Recovery Act also included provisions to reform the unemployment insurance system, making it work more effectively in today's economy. These provisions extend unemployment insurance eligibility to many low-wage and part-time workers who were not previously eligible. These and other recent initiatives will also make it possible for many unemployed workers to draw out-of-work benefits while participating in training that prepares them to enter new fields.

Even after the labor market recovers, the dynamic American economy will continue to pose challenges—while also creating opportunities—for workers. Rapid technological change will cause shifts in the labor market, forcing some workers into unanticipated mid-life career changes. Policy can help to ease these transitions. Most important, it can ensure that workers who may switch careers several times during their lifetimes are able to maintain health insurance and to support themselves in retirement. As discussed in Chapter 7, comprehensive health care reform will eliminate preexisting conditions restrictions in health insurance and improve access to insurance in the individual market. These changes will make it much easier for people to maintain insurance when they change jobs or pursue entrepreneurial opportunities.

Declines in stock prices and home values have put serious pressure on many Americans' retirement plans and have highlighted the importance of improved retirement security. The Administration has proposed several measures to increase saving by low- and middle-income workers. Efforts include expanded access to retirement plans along with rule changes to streamline enrollment in 401(k) and IRA programs, facilitate simple saving strategies, and reorient program default options to emphasize saving. And, most important, the Administration is committed to protecting Social Security, thus ensuring that it can provide a reliable source of income for future retirees, as it has for their parents and grandparents.

Health and retirement security need to be accompanied by labor market institutions that support and protect workers. Labor unions have long been a force helping to raise standards of living for middle-class families. They remain important, and we need to reinforce the principle that workers who wish to join a union should have the right to do so.

Another set of institutions in need of attention is our immigration system. The current framework absorbs considerable resources but does not serve anyone—native workers, employers, taxpayers, or potential immigrants—well. Particular problems are posed by the presence of large numbers of unauthorized immigrants and the lengthy queues—some over 20 years—for legal residency.

Reform of the immigration system can strengthen our economy and labor market. Reform should provide a path for those who are currently here illegally to come out of the shadows. It should include strengthened border controls and better enforcement of laws against employing undocumented workers, along with programs to help immigrants and their children quickly integrate into their communities and American society. Future immigration policy should be more responsive to our economy's changing needs. Reform of the employment-based visa and permanent residency programs will also help reduce the incentives to immigrate illegally by giving potential immigrants a more viable legal path into the United States.

# **EDUCATION AND TRAINING:** THE GROUNDWORK FOR LONG-TERM PROSPERITY

Rebuilding our economy on a more sustainable basis, investing in future productivity, fostering technological and other forms of innovation, and reforming our health care system to deliver better outcomes at lower costs are all crucial to long-run increases in living standards, and all are discussed elsewhere in this report. But one fundamental component of a strategy to ensure balanced, sustained, and widely shared growth is a robust system of education and training. The positive link between education and worker productivity—the cornerstone of economic prosperity—is well established. In fact, research has credited education with up to one-third of the productivity growth in the United States from the 1950s to the 1990s (Jones 2002).

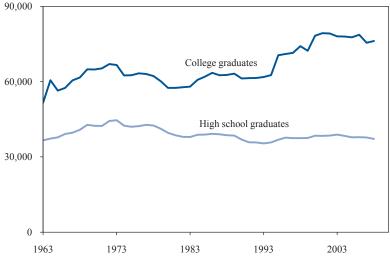
# Benefits of Education

At the individual level, there is a strong relationship between educational attainment and earnings (Card 1999). The earnings premium shows up at all levels of education. Those who complete one year of postsecondary education earn more than those who stop after high school, while those who complete two years or finish degrees earn more still. And job training for the unemployed has been shown by rigorous studies to raise participants' future earnings (Manpower Demonstration Research Corporation 1983; Jacobson, LaLonde, and Sullivan 2005).

The earnings premium associated with education is far larger than the cost—in tuition and forgone earnings—of remaining in school (Barrow and Rouse 2005), and it has grown in recent decades. Figure 8-5 shows the trends in the average annual earnings of individuals with high school diplomas but no college and of those with bachelor's degrees. In the mid-1960s, college graduates earned roughly 50 percent more than high school graduates, on average; by 2008, the premium had more than doubled.

Figure 8-5
Total Wage and Salary Income by Educational Group

Total wage and salary income, 2008 dollars



Notes: Figures for full-time workers aged 25-65 who worked 50-52 weeks in the calendar year. Before 1991, education groups are defined based on the highest grade of school or year of college completed. Beginning in 1991, groups are defined based on the highest degree or diploma earned. Incomes are deflated using the CPI-U.

Source: Department of Labor (Bureau of Labor Statistics), March Current Population Survey, 1964-2009.

Education has other important benefits besides increased earnings. For example, recent studies have found that education improves people's health (Cutler and Lleras-Muney 2006; Grossman 2005). The explanation may be that better educated people make better health-related decisions, such as exercising or not smoking, or that education allows for easier navigation of a complex health care system. Education's benefits also extend beyond the individual. More educated people commit fewer crimes, vote more, and are more likely to support free speech (Dee 2004; Lochner and Moretti 2004). They also make their neighbors and coworkers more productive (Moretti 2004).

#### Trends in U.S. Educational Attainment

The United States has historically had the world's best education system. Although most European countries once limited advanced education to the economic elite, the United States has historically made it broadly available. U.S secondary schools have been free and generally accessible since early in the 20th century. By the 1950s, nearly 80 percent of older teens (aged 15–19) in the United States were enrolled in secondary school, compared with fewer than 40 percent in Western Europe. The

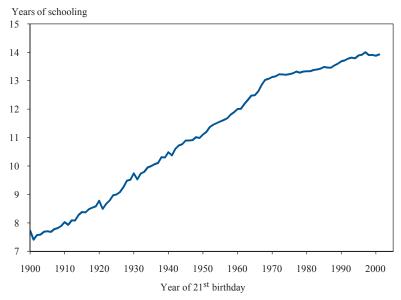
widespread expansion of state colleges and universities, begun under the Morrill Land Grant Act of 1862, led to even further advances in American education. Average educational attainment of people born in 1975 was over five years higher than that of those born in 1895. About 50 percent of the gain was attributable to increases in high school education, about 30 percent to increases in college and postcollege education, and the remainder to continued increases in elementary education (Goldin and Katz 2008). During the second half of the 20th century, as educational attainment rose worldwide, the United States became a clear leader in graduate education, attracting the brightest students from around the world. Some remained in the United States, adding importantly to the Nation's human capital stock and its diversity, while others returned to their home countries and used the education they got here to help increase prosperity there.

Harvard economists Claudia Goldin and Lawrence Katz contend that America's strong educational system helped make the United States the richest nation in the world (Goldin and Katz 2008). Over the past several decades, however, U.S. leadership in education has slipped. Although the Nation remains preeminent in postgraduate education, we can no longer claim to be home to the most educated people in the world.

For decades, the number of educated American workers grew faster than did the demand for them. But beginning with the cohort that completed its schooling in the early 1970s, the growth rate in the supply of educated Americans slowed significantly. This can be seen in Figure 8-6, which shows the mean years of schooling of Americans by year of birth. High school and college graduation rates, which grew steadily for many decades, began to stagnate, and younger generations no longer graduate at significantly higher rates than did previous generations. This slowdown in the growth of educational attainment has contributed to rising income inequality, as the shortage of college-educated workers has meant rising wages for high-skill work and falling wages for work requiring less education. The current recession may provide an opportunity to reverse this slowdown but only if our education system can keep up with increased demand (Box 8-1).

Meanwhile, other developed countries have continued to improve their educational outcomes, and the United States has slipped behind several other advanced countries at both the high school and postsecondary levels. Among the cohort born between 1943 and 1952—a group that largely completed its education by the late 1970s—the United States leads the world in the share with at least a bachelor's degree or the equivalent. In more recent cohorts, the percentage completing college has been roughly stable in the United States while increasing substantially in several peer countries. Figure 8-7 shows that only 40 percent of Americans born between 1973 and

Figure 8-6
Mean Years of Schooling by Birth Cohort



Notes: Years of schooling at 30 years of age. Methodology described in Goldin and Katz (2007). Graph shows estimates of the average years of schooling at 30 years of age for each birth cohort, obtained from regressions of the log of mean years of schooling by birth cohort-year cell on a full set of birth cohort dummies and a quartic in age. Sample includes all native-born residents aged 25 to 64 in the 1940-2000 decennial census IPUMS samples and the 2005 CPS MORG. For further details on the method and data processing, see Goldin and Katz (2008, Figure 1.4) and DeLong, Goldin, and Katz (2003, Figure 2.1). Sources: Department of Commerce (Bureau of the Census), 1940-2000 Census IPUMS, 2005 CPS MORG; Goldin and Katz (2007).

# Box 8-1: The Recession's Impact on the Education System

Today's weak labor market is likely to lead to short- and mediumrun increases in school enrollments, as high unemployment pushes many young people to increase their job skills through further education. Indeed, college enrollments rose substantially in 2008 relative to 2007, and preliminary reports suggest further increases in 2009. The resulting increase in educational attainment will offer long-run benefits for the economy, because today's students will be more productive workers when labor demand returns to full strength.

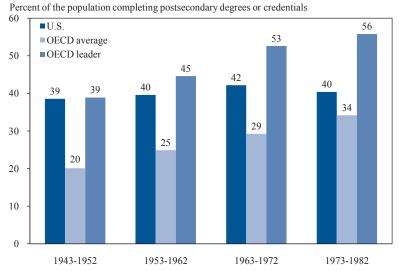
In the short run, however, elevated enrollments are placing strains on colleges, particularly the two-year colleges that are seeing most of the enrollment increase, as colleges' costs are rising at the same time state

Continued on next page

#### Box 8-1, continued

funding is being cut. Elementary and secondary schools are under similar strains. In part because of reduced state funding, schools employed roughly 70,000 fewer teachers and teachers' assistants in October 2009 than a year earlier, even though student enrollments were up. The reduction in per-pupil resources at both levels is an unfortunate budgetary response. At this time of high unemployment, it is desirable to encourage human capital formation, not make it more difficult. The State Fiscal Stabilization Fund, part of the Recovery Act, is helping in this regard, and recipients credit the Act with creating or saving at least 325,000 education jobs through the third quarter of 2009.

Figure 8-7 Educational Attainment by Birth Cohort, 2007



Notes: Postsecondary degrees or credentials include only those of normal duration of two years or more and correspond to the Organisation for Economic Co-operation and Development (OECD) tertiary (types A and B) and advanced research qualifications. U.S. data reflect associate's, bachelor's, and more advanced degrees. Sources: Organisation for Economic Co-operation and Development (2009); OECD

Indicators Table A1.3a.

1982 have completed associate's degrees or better. Equivalent attainment rates are higher in nine other countries, led by Canada and Korea, where 56 percent completed some postsecondary degree or extended certificate program. High school graduation rates show a similar pattern, with the United States slipping from the top rank to the middle in recent decades.

#### U.S. Student Achievement

U.S. student achievement, as measured by assessments that capture how much students know at particular ages or grades, has improved notably in recent years, even as attainment has stagnated. The most reliable barometer is the National Assessment of Education Progress (NAEP), which has been administered consistently for more than three decades. Figure 8-8 shows average NAEP math scores for students at three different ages from 1978 through 2008. The performance of 9-year-olds (who are typically enrolled in 4th grade) and 13-year-olds (typically 8th grade) has improved over the past 35 years. The size of the achievement gains is impressive. Nearly three-quarters of 13-year-olds in 2008 scored above the 1978 median, with similar gains throughout the distribution. The performance of 17-year-olds (typically 12th graders) has also improved, although the gain was smaller.

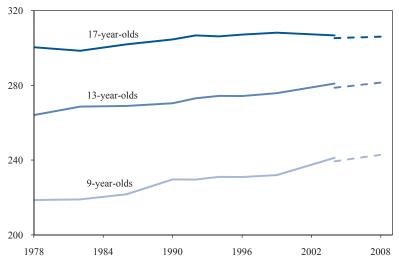
Despite recent progress, American students are not doing as well as they should. In addition to average performance, the NAEP program measures the fraction of students who attain target achievement levels defined based on the skills that children at each age and grade should have mastered. A student is judged "proficient" if he or she demonstrates age- or grade-appropriate competency over challenging subject matter and shows an ability to apply knowledge to real-world situations. In the most recent tests, only 31 percent of 8th graders were proficient in reading and only 34 percent in math. Proficiency rates are similar in 4th grade.

For some subgroups, proficiency rates were much lower. Only 12 percent of black students and 17 percent of Hispanics were proficient in math in 8th grade. The low achievement in these subgroups is also reflected in low attainment. In 2000, only 81 percent of black young adults (aged 30–34) had graduated from high school, and only 15 percent had bachelor's degrees. Although racial and ethnic gaps have narrowed importantly in recent decades—the black-white and Hispanic-white mathematics gaps at age 13 in the NAEP long-term trend data are each only two-thirds as large as in 1978—the low attainment and achievement of black and Hispanic students remain disturbing evidence of educational inequality in our society. Our future prosperity depends on ensuring that American children from all backgrounds have the opportunity to become productive workers.

Nowhere does low performance more acutely affect the health of the U.S. economy than in the areas of science, technology, engineering, and mathematics (known commonly by the acronym STEM). Employers frequently report that they have difficulty finding Americans with the qualifications needed for technical jobs and are forced to look abroad for suitably skilled workers. Indeed, international comparisons show that other countries achieve higher outcomes in STEM skills than we do. In

Figure 8-8 Long-Term Trend Math Performance





Notes: In 2004 and thereafter, accommodations were made available for students with disabilities and for English language learners, and other changes in test administration conditions were introduced. Dashed lines represent data from tests given under the new conditions.

Source: Department of Education (Institute of Education Sciences, National Center for Education Statistics), National Assessment of Educational Progress (NAEP), Long-Term Trend Mathematics Assessments.

2006, U.S. 15-year-olds scored well below the Organisation for Economic Co-operation and Development (OECD) average for science literacy on the Programme for International Student Assessment, and behind most other OECD nations on critical skills and competencies, such as explaining scientific phenomena and using scientific evidence.

# A PATH TOWARD IMPROVED **EDUCATIONAL PERFORMANCE**

Concerned about the impact of stagnating educational outcomes on U.S. economic growth, the President has pledged to return our Nation to the path of increasing educational attainment. He has challenged every young American to commit to at least one year of higher education or career training. He also has set ambitious goals: by 2020, America should "once again have the highest proportion of college graduates in the world" (Obama 2009a), and U.S. students should move "from the middle to the top

of the pack in science and math" (Obama 2009b). Meeting these challenges will require substantial commitment and reform, not just at the postsecondary level but also in elementary and high schools and even in early childhood programs.

#### Postsecondary Education

The Nation's postsecondary education system encompasses a diverse group of institutions, including public, nonprofit, and for-profit organizations offering education ranging from short-term skill refresher programs up to doctoral degrees.

In many of our peer countries, postsecondary education is entirely or largely state funded, with little direct cost to the student. U.S. postsecondary students, however, are generally charged tuition and fees, which have risen substantially in real terms over the past three decades. It is important to keep in mind that most of our students do not pay full tuition, as more than 60 percent of full-time students receive grant aid, and millions more also benefit from Federal tax credits and deductions for tuition. But increases in financial aid and Federal assistance have not kept up with rising costs, and the net price of attendance at four-year public colleges has risen nearly 20 percent over the past decade (College Board 2009).

Young people may have trouble financing expensive investments in college education even when these investments will pay off through increased long-term earnings. Thus, rising college costs represent an important barrier to enrollment. One study indicates that a \$1,000 reduction in net college costs increases the probability of attending college by 5 percentage points and leads students to complete about one-fifth of a year more college (Dynarski 2003). Thus the dramatic increase in the price of college has likely had an adverse impact on college attendance and completion. Moreover, the impact of cost increases is not evenly distributed: while students from high-income families can relatively easily absorb the increases, students from lower-income families are disproportionately deterred.

The rising cost of college is affecting educational attainment and will continue to do so unless we find ways to make college more affordable. To this end, the Administration has secured historic investments in student aid, including more than \$100 billion over the next 10 years for more generous Pell Grants, much of it financed through the elimination of wasteful subsidies to private lenders in the student loan program. This will ensure that virtually all students eligible for Pell Grants will receive larger awards. In addition, the Administration is taking steps to dramatically simplify the student aid application process, the complexity of which deters

many aid-eligible students from even applying. This simplification will help millions more students benefit from the Federal investments in college accessibility and affordability.

Tuition is not the only barrier to college completion. A great many students, including nearly half of those at two-year institutions, begin college but fail to graduate. Completion rates are particularly low for low-income students. One way to raise completion rates is through better design of the institutional environment. Recent rigorous studies have shown that improvements such as enhanced student services, changes in how classes are organized, innovations in how remedial education is structured, and basing some portion of financial aid on student performance can all contribute to improved persistence (Scrivener et al. 2008; Scrivener, Sommo, and Collado 2009; Richburg-Hayes et al. 2009).

# Training and Adult Education

An often-overlooked component of the Nation's education system, one in which the government makes a major investment, is job training and adult education. In 2009, the Federal Government devoted more than \$17 billion to job training and employment services and spent substantial additional funds on Pell Grants for vocational and adult education students. Training is provided by a diverse set of institutions, including proprietary (for-profit) schools, four-year colleges, community-based organizations, and public vocational and technical schools. Box 8-2 discusses a particularly important type of training provider, community colleges.

Studies have documented that training and adult education programs improve participants' labor market outcomes. For example, a recent study found that Workforce Investment Act training programs for adults boosted employment and earnings, on average, although results varied substantially across states (Heinrich, Mueser, and Troske 2008). Evidence is also growing that state training programs for adults can have large positive impacts on long-term earnings (Hotz, Imbens, and Klerman 2006; Dyke et al. 2006).

Education and training for adults play critical roles in helping displaced workers regain employment in the short term and in helping them obtain and refresh their skills in the face of an ever-changing workplace. For example, one study of displaced workers in Washington State suggests that attending a community college after displacement during the 1990s increased long-term earnings about 9 percent for men and about 13 percent for women (Jacobson, LaLonde, and Sullivan 2005). The benefits were greatest for academic courses in math and science, as well as for courses related to the health professions, technical trades (such as air conditioner repair), and technical professions (such as software development).

Although research demonstrates the value of training programs, there is no doubt that the current system could be more effective. Five strategies that could improve effectiveness are: aligning goals across different elements of the education and training system and constructing a cumulative curriculum; collaborating with employers to ensure that curricula are aligned with workforce needs and regional economies; making sure that scheduling is flexible and that curricula meet the needs of older and nontraditional students; providing incentives and flexibility for institutions and programs to continually improve and innovate; and establishing a stronger accountability system that measures the right things, makes performance data available in an easily understood format, and does not create perverse incentives to avoid serving populations that most need assistance. Reauthorization of the Workforce Investment Act will provide an opportunity to implement these strategies.

## Box 8-2: Community Colleges: A Crucial Component of Our Higher Education System

Community colleges are an important but often overlooked component of the Nation's postsecondary education system. These colleges may offer academic programs preparing students to transfer to four-year colleges to complete bachelor's degrees, academic and vocational programs leading to terminal associate's degrees or certificates, remedial education for those who want to attend college but who left high school insufficiently prepared, and short-term job training or other educational experiences. Most also offer contract training in which they work directly with the public sector, employers, and other clients (such as prisons) to develop and provide training for specific occupations or purposes.

Community colleges are public institutions that typically charge very low tuition and primarily serve commuters, which makes them accessible to people who do not have the resources for a four-year college. They generally have "open door" admissions policies, requiring only a high school diploma or an ability to benefit from the educational experience. This makes them a good choice for older and nontraditional students, as well as for potential students who want to pursue additional education and build their human capital but want or need to do so at relatively low cost.

More than 35 percent of first-time college freshmen enroll at community colleges. These colleges also serve about 35 percent of individuals receiving job training through the Workforce Investment Act, along with a notable proportion of adults attending adult basic education, English as a second language, and General Educational Development

Continued on next page

#### Box 8-2, continued

(GED) preparation classes. Researchers have estimated that attending a community college significantly raises earnings, even for individuals who do not complete degrees (Kane and Rouse 1999; Marcotte et al. 2005).

Community colleges will form the linchpin of efforts to increase college attendance and graduation rates. The Administration has proposed a new program of competitive grants for implementing college completion initiatives, with a focus on community colleges. Along with the sorts of strategies mentioned above for training programs more generally, community college initiatives could include building better partnerships between colleges, businesses, the workforce investment system, and other workforce partners to create career pathways for workers; expanding course offerings including those built on partnerships between colleges and high schools; and stronger accountability for results. These strategies will help both to strengthen colleges and to raise completion rates. The proposed program also recognizes the need to learn from such investment and therefore supports record levels of funding for research to evaluate the initiatives' effectiveness.

## Elementary and Secondary Education

Students who leave high school with inadequate academic preparation face greater challenges to success in postsecondary training. In 2001, nearly one-third of first-year college students in the United States needed to take remedial classes in reading, writing, or mathematics, at an estimated cost of more than \$1 billion (Bettinger and Long 2007). The need for remediation is a clear warning sign that a student may later drop out. In one study, students who needed the most remediation were only about half as likely to complete college as their peers who were better prepared (Adelman 1998). Of course, students who leave high school well prepared are more successful in the labor market as well as in college.

The task of improving college and labor market preparedness begins in elementary and secondary school, if not earlier. Among the most important contributors to enhanced student outcomes is effective teaching. Common sense and research both recognize the importance of high-quality teachers, and yet too few teachers reach that standard. Improvements are needed in teacher training, recruitment, evaluation, and in-service professional development.

Not only is the supply of high-quality teachers insufficient but their distribution across schools is inequitable. Frequently, schools with high

concentrations of minority and low-income students, the very schools that need quality teachers the most, cannot recruit and retain skilled educators. In New York State, 21 percent of black students had teachers who failed their general knowledge certification exam on the first attempt, compared with 7 percent of white students (Lankford, Loeb, and Wyckoff 2002). A particular problem is high teacher turnover: high-poverty and high-minority schools have much higher turnover than do schools with more advantaged students. Some districts have begun experimenting with financial incentives for teaching in high-need schools; these efforts need to be rigorously evaluated and, if they are found to be successful, disseminated widely.

Improving teacher quality, however, is not the only promising strategy for change. Others include extending both the school day and the school year. Many successful strategies have emerged from schools that were given freedom to explore new and creative approaches to long-standing problems. Although traditional public schools can be agents for change, the public charter school model is tailor-made for such innovation. The Nation's experience with charter schools has been fairly brief, but evidence to date suggests that some of these schools have found successful strategies for raising student achievement. An important future challenge will be to take these strategies and other innovative school models to scale, even as schools continue to search for ever-better approaches.

Although most reforms in recent years have focused on elementary schools, high school reform is now rising to the top of the education policy agenda. Promising approaches to improving secondary education include programs that offer opportunities for accelerated instruction and individualized learning, programs to expand access to early college coursework before finishing high school, residential schools for disadvantaged students, and specialty career-focused academies.

An environment that supports innovation must be coupled with strong accountability. Some innovations are bound to be unsuccessful, and indeed there is substantial variation in the quality of both public and charter schools. Strong accountability systems that promote effective instructional approaches can provide incentives for all school stakeholders to perform at their best and help to identify struggling schools in need of intervention. Systems are needed to identify failing schools, based on high-quality student assessments as well as other metrics. At the same time, accountability strategies must be carefully crafted to discourage "teaching to the test" and other approaches that aim at the measures used for evaluating schools rather than at true student learning. Accountability strategies must also recognize that student achievement reflects family, community, and peer influences as well as that of the school.

Providing incentives for schools identified as failing to improve can significantly improve student outcomes. Several states have done just that. Sixteen years ago, Massachusetts began setting curriculum frameworks and holding schools accountable for student performance. Massachusetts students have historically scored above the national average on various academic achievement measures, but since passing school accountability reform, Massachusetts has moved even farther ahead. In Florida, too, a strong school accountability plan, implemented in 1999, has shown positive results (Figlio and Rouse 2006; Rouse et al. 2007).

The Recovery Act included an unprecedented Federal investment in elementary and secondary education. The Race to the Top Fund provides competitive grants to reward and encourage states that have taken strong measures to improve teacher quality, develop meaningful incentives, incorporate data into decisionmaking, and raise student achievement in low-achieving schools. The upcoming reauthorization of the Elementary and Secondary Education Act provides an opportunity to make further progress.

#### Early Childhood Education

High-quality elementary and secondary schools are necessary, but they are not enough. In recent years, researchers and educators have learned a great deal about how important the school readiness of entering kindergarteners is to later academic and labor market success. School readiness involves both academic skills, as measured by vocabulary size, complexity of spoken language, and basic counting, and social and emotional skills such as the ability to follow directions and self-regulate. Children who arrive at school without these skills lack the foundation on which later learning will build.

Recent research indicates that as many as 45 percent of entering kindergarteners are ill-prepared to succeed in school (Hair et al. 2006). Reducing the share of at-risk preschoolers is critical to strengthening America's educational system and its labor market in the long run. Highquality early childhood interventions can significantly improve school readiness, especially for low-income children. Intensive programs that combine high-quality preschool with home visits and parenting support have been shown to raise children's later test scores and educational attainment and also to reduce teen pregnancy rates and criminality (Karoly et al. 1998; Schweinhart et al. 1985).

The programs on which the most compelling research is based include small classes, highly educated teachers with training in early childhood education, and stimulating curricula. They feature parent training components that help parents reinforce what the teachers do in the class-room. The programs also assist teachers in identifying health and behavior problems that can inhibit children's intellectual and emotional development. Importantly, even intensive, expensive programs are cost-effective. For example, one particularly intensive program was found to produce \$2.50 in long-run savings for taxpayers for every dollar spent, because in adulthood the participating children earned higher incomes, used fewer educational and government resources, and had lower health care costs (Barnett and Masse 2007).

Less intensive programs can be effective as well. The Head Start program provides an academically enriching preschool environment for 3- and 4-year-olds, at a cost in 2008 of only about \$7,000 per child per year. Although the quality of Head Start centers varies widely, studies have found that attendance at a well-run center improves children's later-life outcomes (Currie and Thomas 1995).

Ensuring that all families have access to the services and support they need to help prepare their children for kindergarten will require a strong system of high-quality preschools and other early-learning centers. Providers must be held to high standards and given the resources—including qualified staff and teachers—needed for success. And when children leave their preschool and prekindergarten programs, they must have access to quality kindergartens that ease the transition to elementary school.

#### Conclusion

The recession has taken a severe toll on American workers and many will continue to suffer from its effects for some time to come. A strong safety net will be essential to helping working families through this trying time. As the economy strengthens, we must rebuild our labor market institutions in ways that ensure that prosperity and economic security are more widely shared.

Going forward, workers who have strong analytic and interactive skills will be best able to secure good jobs and to contribute to continued U.S. prosperity. Education must begin in preschool, because children's long-run success depends on arriving in kindergarten ready to learn, and be available throughout adulthood, because our increasingly dynamic economy requires lifelong learning. The Administration's education agenda will strengthen our education and training institutions at all levels.



#### CHAPTER 9

# TRANSFORMING THE ENERGY SECTOR AND ADDRESSING CLIMATE CHANGE

The President has called climate change "one of the defining challenges of our time." If steps are not taken to reduce atmospheric concentrations of carbon dioxide ( $\rm CO_2$ ) and other greenhouse gases, scientists project that the world could face a significant increase in the global average surface temperature. Projections indicate that  $\rm CO_2$  concentrations may double from pre-industrial levels as early as 2050, and that the higher concentrations are associated with a likely long-run temperature increase of 2 to 4.5 °C (3.6 to 8.1 °F). With temperatures at that level, climate change will lead to a range of negative impacts, including increased mortality rates, reduced agricultural yields in many parts of the world, and rising sea levels that could inundate low-lying coastal areas.

The planet has not experienced such rapid warming on a global scale in many thousands of years, and never as a result of emissions from human activity. By far the largest contribution to this warming comes from carbonintensive fossil fuels, which the world depends on for cooking, heating and cooling homes and offices, transportation, generating electricity, and manufacturing products such as cement and steel.

The potential for significant damages if emissions from these activities are not curbed makes it crucial for the world to transform the energy sector. This transformation will entail developing entirely new industries and making major changes in the way energy is produced, distributed, and used. New technologies will be developed and new jobs created. The United States can play a leadership role in these efforts and become a world leader in clean energy technologies. The transformation to a clean energy economy will also reduce our Nation's dependence on oil and improve national security, and could reduce other pollutants in addition to greenhouse gases.

As this transformation unfolds, two market failures provide a motivation for government policy. First, greenhouse gas emissions are a

classic example of a negative externality. As emitters of greenhouse gases contribute to climate change, they impose costs on others that are not taken into account when making decisions about how to produce and consume energy-intensive goods. Second, the development of new technologies has positive externalities. As discussed in Chapter 10, the developers of new technologies generally capture much less than the full benefit of their ideas to consumers, firms, and future innovators, and thus underinvest in research and development.

This diagnosis of the market failures underlying climate change provides clear guidance about the role of policy in the area. First, policy should take steps to ensure that the market provides the correct signals to greenhouse gas emitters about the full cost of their emissions. Second, policy should actively promote the development of new technologies. One way to accomplish these goals is through a market-based approach to reducing greenhouse gases combined with government incentives to promote research and development of new clean energy technologies. Once policy has ensured that markets are providing the correct signals and incentives, the operation of market forces can find the most effective and efficient paths to the clean energy economy. The Administration's policies in this area are guided by these principles.

# GREENHOUSE GAS EMISSIONS, CLIMATE, AND ECONOMIC WELL-BEING

The world's dependence on carbon-intensive fuels is projected to continue to increase global average temperature as greenhouse gas emissions build in the atmosphere. These emissions are particularly problematic because many are long-lived: for instance, it will take a century for slightly more than half of the carbon dioxide now in the atmosphere to be naturally removed. The atmospheric buildup of greenhouse gases since the start of the industrial revolution has already raised average global temperature by roughly 0.8 °C (1.4 °F). If the concentrations of all greenhouse gases and aerosols resulting from human activity could somehow be kept constant at current levels, the temperature would still go up about another 0.4 °C (0.7 °F) by the end of the century. It is important to note that the overall impact of today's emissions would be even higher were it not for the offsetting net cooling effect of increases in atmospheric aerosols such as particulate matter caused by the incomplete combustion of fossil fuels in coal-fired power plants.

But keeping atmospheric concentrations constant at today's level is virtually impossible. Any additional greenhouse gas emissions contribute

to atmospheric concentrations. And because of projected economic growth, particularly in developing countries, greenhouse gas emissions will continue to grow. Moreover, the sources of atmospheric aerosols that have partly offset the greenhouse warming experienced so far are not likely to grow apace because governments around the world are taking actions to curb these emissions to improve public health and control acid rain.

#### Greenhouse Gases

The principal long-lived greenhouse gases whose concentrations have been affected by human activity are carbon dioxide, methane, nitrous oxide, and halocarbons. Sulfur hexafluoride, though emitted in smaller quantities, is also a very potent greenhouse gas. All have increased significantly from pre-industrial levels. Carbon dioxide is emitted when fossil fuel is burned to heat and cool homes, fuel vehicles, and manufacture products such as cement and steel. Deforestation also releases carbon dioxide stored in trees and soil. The primary sources of methane and nitrous oxide are agricultural practices, natural gas use, and landfills. Halocarbons originate from refrigeration and industrial processes, while sulfur hexafluoride emissions mainly stem from electrical and industrial applications.

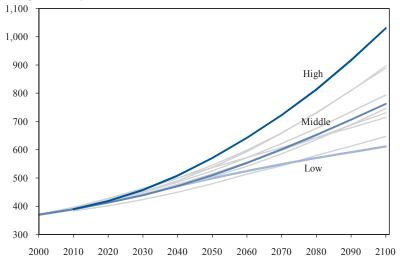
The pre-industrial atmospheric concentration of carbon dioxide was about 280 parts per million (ppm), meaning that 280 out of every million molecules of gas in the atmosphere were carbon dioxide. As of December 2009, its concentration had increased to about 387 ppm. Taking into account other long-lived greenhouse gases would result in a higher warming potential, but the net cooling effect of aerosols that have been added by humans to the atmosphere nearly cancels the effect of those other gases. Thus, the overall effect of human activity on the atmosphere to date is (coincidentally) about the same as that of the carbon dioxide increase alone.

A variety of models project that, absent climate policy, atmospheric concentrations of carbon dioxide will continue to grow, reaching levels ranging from 610 to 1030 ppm by 2100 (Figure 9-1). When the warming effects of other long-lived greenhouse gases are included, this range is equivalent to 830 to 1530 ppm. The breadth of the range reflects uncertainty about future energy supply, energy demand, and the future behavior of the carbon cycle.1

<sup>&</sup>lt;sup>1</sup> Underlying uncertainty about future energy supply is uncertainty regarding the costs and penetration rates of technology, and resource availability. Uncertainty about future energy demand is driven by uncertainty regarding growth in population, gross domestic product, and energy efficiency.

Figure 9-1
Projected Global Carbon Dioxide Concentrations with No Additional Action

Parts per million by volume



Note: The figure shows baseline projections from 10 different models, with the models that produce the highest, middle, and lowest atmospheric concentration of carbon dioxide in 2100

Source: Stanford Energy Modeling Forum, EMF 22 International Scenarios, 2009.

# Temperature Change

The implications of large increases in greenhouse gas concentrations for temperature change are quite serious. There is a consensus among scientists that a doubling of  $\mathrm{CO}_2$  concentrations (or any equivalent combination of greenhouse gases) above the pre-industrial level of 280 ppm is likely to increase global average surface temperature by 2 to 4.5 °C (3.6 to 8.1 °F), with a best estimate of about 3 °C (5.4 °F).² Given much higher projections of greenhouse gas concentrations by the end of the century, a recent study projects that the global average temperature in 2100 is likely to be 4.2 to 8.1 °C (7.6 to 14.6 °F) above pre-industrial levels, absent effective policies to reduce emissions (Webster et al. 2009).

Increases in global average temperature mask variability by region. For instance, absent effective policy to reduce greenhouse gas emissions, mid-continent temperature increases are likely to be about 30 to 60 percent higher than the global average, while increases in parts of the far North (for instance, parts of Alaska, northern Canada, and Russia) are expected to be double the global average. The power of the strongest hurricanes and

<sup>&</sup>lt;sup>2</sup> These values express what is likely to happen in equilibrium. Average surface temperature does not reach a new equilibrium for some decades after any given increase in the concentration of heat-trapping gases because of the large thermal inertia of the oceans.

typhoons is likely to grow, as are the frequency and intensity of extreme weather events such as heat waves, heavy precipitation, floods, and droughts. One study, for example, estimates that the number of days that mean temperature (calculated as the average of the daily minimum and daily maximum) in the United States will exceed 90 °F will increase from about one day a year between 1968 and 2002 to over 20 days a year by the end of the century (Deschênes and Greenstone 2008).

As the increase in global average temperature warms seawater and expands its volume, sea levels are projected to rise. Melting glaciers also contribute to sea-level rise. Sea level has already risen about 0.6 feet since 1900; it is projected to rise another 0.6 to 1.9 feet because of volume expansion and glacial melt by the end of the century. These estimates exclude possible rapid ice loss from the Greenland and Antarctic ice sheets, events that are highly uncertain but that could cause another 2 feet or more of sea level rise by 2100. Without expensive adaptation, low-lying land in coastal areas around the world could become permanently flooded as a result.

# Impact on Economic Well-Being

Although predicting future economic impacts associated with increases in global average temperature involves a large degree of uncertainty, these economic effects are likely to be significant and largely negative, and to vary substantially by region. Even for countries that may be less vulnerable, large negative economic impacts in other regions will inevitably jeopardize their security and well-being. For instance, the temperature extremes and other changes in climate patterns associated with global average temperature increases of 2 °C (3.6 °F) or more are projected to increase mortality rates and reduce agricultural productivity in many regions, threaten the health and sustainability of many ecosystems, and necessitate expensive measures to adapt to these changes. Box 9-1 discusses recent research on projected physical and economic impacts in the United States.

Some regions of the world are expected to be particularly hardhit. For example, low-lying and island countries are especially vulnerable to sea-level rise. Further, developing countries, especially those outside moderate temperature zones, may be especially poorly equipped to confront temperature changes. Recent research, for example, suggests that India may experience substantial declines in agricultural yields and increases in mortality rates (Guiteras 2009; Burgess et al. 2009).

These projected changes are predicated on likely increases in global mean temperature. Particularly worrisome is the possibility of much greater temperature change, should more extreme projections prove accurate. Although more drastic increases are less likely, their consequences could be

devastating. For example, the costs of climate change are expected to grow nonlinearly (that is, more rapidly) as temperatures rise (Box 9-2).

In the United States, continued reliance on petroleum-based fuels poses challenges that go beyond climate change. It makes the economy susceptible to potentially costly spikes in crude oil prices and imposes significant national security costs. A panel of retired senior military officers and national security experts concluded that unabated climate change may act as a "threat multiplier" to foment further instability in some of the world's most unstable regions (CNA Corporation 2007). Fossil fuel consumption is also associated with other forms of pollution that harm human health, such as particulate, sulfur dioxide, and mercury emissions from coal-powered electricity generation.

#### Box 9-1: Climate Change in the United States and Potential Impacts

The average temperature in the United States has risen more than 1 °C (2 °F) over the past 50 years. However, this increase masks considerable regional variation. For instance, the temperature increase in Alaska has been more than twice the U.S. average. By the end of the century, the United Nations Intergovernmental Panel on Climate Change projects that average continental U.S. temperatures will increase by another 1.5 to 4.5 °C (about 2.7 to 8.1 °F) absent climate policy (Intergovernmental Panel on Climate Change 2007). Greater increases are possible, depending in part on how fast emissions rise over time. Climate change will likely bring substantial changes to water resources, energy supply, transportation, agriculture, ecosystems, and public health. Potential effects on U.S. water availability and agriculture are described below (Karl, Melillo, and Peterson 2009).

Precipitation already has increased an average of 5 percent over the past 50 years, with increases of up to 25 percent in parts of the Northeast and Midwest and decreases of up to 20 percent in parts of the Southeast. In the future, these trends will likely be amplified. The amount of rain falling in the heaviest downpours has increased an average of 20 percent over the past century, a trend that is expected to continue. In addition, Atlantic hurricanes and the strongest cold-season storms in the North are likely to become more powerful. In recent decades, the West has seen more droughts, greater wildfire frequency, and a longer fire season. Increases in temperature and reductions in rainfall frequency will likely exacerbate future droughts and wildfires.

Continued on next page

#### Box 9-1, continued

Although warmer temperatures may extend the growing season in the United States for many crops, large increases in temperature also may harm growth and yields. One study finds that yields are relatively unaffected by changes in mean temperature, but that they are vulnerable to an increase in the number of very hot days (Schlenker and Roberts 2009). That said, another study finds that expected changes in temperature in the United States will have a relatively small impact on overall agricultural profits (Deschênes and Greenstone 2007). Neither study accounts for the possible increase in yields from elevated carbon dioxide levels or the possible decrease in yields from increased pests, weeds, and disease.

Climate change is also likely to bring increased weather uncertainty. Extreme weather events—droughts and downpours—may have catastrophic effects on crops in some years. Growing crops in warmer climates requires more water, which will be particularly challenging in regions such as the Southeast that will likely face decreased water availability.

American farmers have substantial capacity for innovation and are already taking steps to adapt to climate change. For instance, they are changing planting dates and adopting crop varieties with greater resistance to heat or drought. They can also undertake more elaborate change. In areas projected to become hotter and drier, some farmers have returned to dryland farming (instead of irrigation) to help the soil absorb more moisture from the rain. How well the private sector can adapt to the effects of climate change and at what cost is still an open question.

#### Box 9-2: Expected Consumption Loss Associated with **Temperature Increase**

One major uncertainty regarding climate change is the relationship between temperature change and living standards, usually measured as total consumption. The highly respected PAGE model produces an estimate of this relationship (see Box 9-2 figure). Specifically, it reports the expected decline in consumption as a fraction of GDP in the year 2100. The range of these estimates is represented by the dotted lines that represent the 5th and 95th percentile of the damage estimates. The range reflects uncertainty about the sensitivity of the climate system to increased greenhouse gas concentrations, the probability of catastrophic events, and several other factors

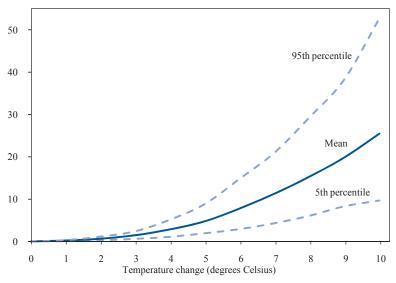
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#### Box 9-2, continued

The figure reveals that the projected losses for the most likely range of temperature changes are relatively modest. For example, at the Intergovernmental Panel on Climate Change's most likely temperature increase of 3  $^{\circ}$ C for a doubling of CO<sub>2</sub> concentration (concentrations in 2100 are likely to be higher), the projected decline is 1.5 percent of GDP.

The projected relationship between temperature changes and consumption losses is nonlinear—that is, the projected losses grow more rapidly as temperature increases. For example, while the projected loss for the first 3 °C is 1.5 percent, the loss at 6 °C is five times higher. And the estimated loss associated with an increase of 9 °C is about 20 percent with a 90 percent confidence interval of 8 to 38 percent. These large losses at higher temperatures reflect the increased probability of especially harmful events, such as large-scale changes in ice sheets or vegetation, or releases of methane from thawing permafrost and warming oceans. Overall, it is evident that policy based on the most likely outcomes may not adequately protect society because such estimates fail to reflect the harms at higher temperatures.





Notes: In the PAGE model, the climate damages as a fraction of global GDP depend on the temperature change and the distribution of GDP across regions, which may change over time. The damage function also includes the probability of a catastrophic event. This graph shows the distribution of damages as a fraction of GDP in year 2100 using the default scenario from PAGE 2002.

Source: Hope (2006).

# JUMP-STARTING THE TRANSITION TO CLEAN ENERGY

To make the transition to a clean energy economy, the United States and the rest of the world need to reduce their reliance on carbon-intensive fossil fuels. The American Reinvestment and Recovery Act of 2009 provides a jump-start to this transition by providing about \$60 billion in direct spending and \$30 billion in tax credits (Council of Economic Advisers 2010). These Recovery Act investments were carefully chosen and provide a soupto-nuts approach across a spectrum of energy-related activities, ranging from taking advantage of existing opportunities to improve energy efficiency to investing in innovative high-technology solutions that are currently little more than ideas. These investments will help create a new generation of jobs, reduce dependence on oil, enhance national security, and protect the world from the dangers of climate change. Ultimately, the investments will put the United States on a path to becoming a global leader in clean energy.

# Recovery Act Investments in Clean Energy

A market-based approach to reducing greenhouse gases (discussed in detail later) will provide incentives for research and development (R&D) into new clean energy technologies as firms search for ever cheaper ways to address the negative externality associated with their emissions. However, as already described, there is a separate externality in the area of R&D. Because it is difficult for the person or firm doing research to capture all of the returns, the private market supplies too little R&D—particularly for more basic forms of R&D, less so as ideas move toward demonstration and deployment. In this case, government R&D policies can complement the use of a market-based approach to reducing greenhouse gas emissions and yield large benefits to society. A policy that broadly incentivizes energy R&D is more likely to maximize social returns than a narrow one targeted at a specific technology because it allows the market, rather than the government, to pick winners. Likewise, funding efforts in support of basic R&D are less likely to crowd out private investment because differences between private and social returns to innovation are largest for basic R&D.

In its 2011 proposed budget, the Administration has stated a commitment to fund R&D as part of its comprehensive approach to transform the way we use and produce energy while addressing climate change. The Recovery Act investments begun in 2009 are a first step in this clean energy transformation. They fall into eight categories that are briefly described here. Energy Efficiency. The Recovery Act promotes energy efficiency through investments that reduce energy consumption in many sectors of the economy. For instance, the Act appropriates \$5 billion to the Weatherization Assistance Program to pay up to \$6,500 per dwelling unit for energy efficiency retrofits in low-income homes. The Recovery Act also appropriates \$3.2 billion to the Energy Efficiency and Conservation Block Grant program, most of which will go to U.S. states, territories, local governments, and Indian tribes to fund projects that improve energy efficiency, reduce energy use, and lower fossil fuel emissions.

Renewable Generation. The Recovery Act investments in renewable energy generation also are leading to the installation of wind turbines, solar panels, and other renewable energy sources. The Energy Information Administration projects that the fraction of the Nation's electricity generated from renewable energy, excluding conventional hydroelectric power, will grow from 3 percent in 2008 to almost 7 percent in 2012 in large part because of the renewal of Federal tax credits and the funding of new loan guarantees for renewable energy through the Recovery Act (Department of Energy 2009a).

*Grid Modernization.* As the United States transitions to greater use of intermittent renewable energy sources such as wind and solar, the Recovery Act is financing the construction of new transmission lines that can support electricity generated by renewable energy. The Act is also investing in new technologies that will improve electricity storage capabilities and the monitoring of electricity use through "smart grid" devices, such as sophisticated electric meters. These investments will improve the reliability, flexibility, and efficiency of the Nation's electricity grid.

Advanced Vehicles and Fuels Technologies. The Recovery Act is funding research on and deployment of the next generation of automobile batteries, advanced biofuels, plug-in hybrids, and all-electric vehicles, as well as the necessary support infrastructure. These efforts are expected to reduce the Nation's dependence on oil in the transportation sector.

Traditional Transit and High-Speed Rail. Grants from the Recovery Act also will help upgrade the reliability and service of public transit and conventional intercity railroad systems. For example, \$8 billion is going to improve existing, or build new, high-speed rail in 100- to 600-mile intercity corridors. Investments in high-speed rail and public transit will increase energy efficiency by improving both access and reliability, thus making it possible for more people to switch to rail or public transit from autos or other less energy-efficient forms of transportation.

*Carbon Capture and Storage.* One approach to limiting greenhouse gas emissions is to capture and store carbon from fossil-fuel combustion to

keep it from entering the atmosphere. The abundance of coal reserves in the United States makes developing such technologies and overcoming barriers to their use a particular priority. For instance, technology to capture carbon dioxide emissions has been used in industrial applications but has not been used on a commercial scale to capture emissions from power generation. Likewise, although some carbon has been stored deep in the ocean or underground in depleted oil reservoirs, questions remain about the permanence of these and other types of storage. The Recovery Act is funding crucial research, development, and demonstration of these technologies.

Innovation and Job Training. The Recovery Act is also investing in the science and technology needed to build the foundation for the clean energy economy. For instance, a total of \$400 million has been allocated to the Advanced Research Projects Agency-Energy (ARPA-E) program, which funds creative new research ideas aimed at accelerating the pace of innovation in advanced energy technologies that would not be funded by industry because of technical or financial uncertainty. The Recovery Act also helps fund the training of workers for jobs in the energy efficiency and clean energy industries of the future.

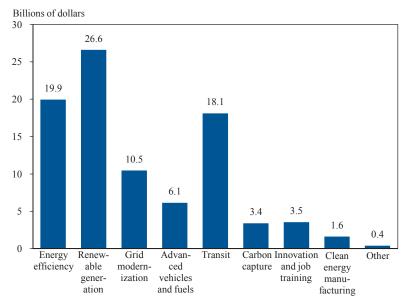
Clean Energy Equipment Manufacturing. The Recovery Act investments are increasing the Nation's capacity to manufacture wind turbines, solar panels, electric vehicles, batteries, and other clean energy components domestically. As the United States transitions away from fossil fuels, demand for advanced energy products will grow, and these investments in clean energy will help American manufacturers participate in supplying the needed goods.

Total Recovery Act Energy Investments. The Recovery Act is investing in 56 projects and activities that are related to transitioning the economy to clean energy. Forty-five are spending provisions with a total appropriation of \$60.7 billion, and another 11 are tax incentives that the Office of Tax Analysis estimates will cost \$29.5 billion through fiscal year 2019, for a total investment of over \$90 billion. In some cases, a relatively small amount of Federal investment leverages a larger amount of non-Federal support. Throughout this section, only the expected subsidy cost of the Federal investment is counted toward the appropriation.<sup>3</sup>

The largest clean energy investments from the Recovery Act go to renewable energy generation and transmission, energy efficiency, and transit. Figure 9-2 illustrates how this \$90 billion investment is distributed across the eight categories of projects described above, along with a ninth "other" category containing programs that do not fit elsewhere.

<sup>&</sup>lt;sup>3</sup> Because of the public nature of the Bonneville and Western Area Power Administrations, the accounting of clean energy investments described here measures the projected drawdown of the borrowing authority to these agencies as the Recovery Act appropriation.

Figure 9-2 Recovery Act Clean Energy Appropriations by Category



Source: Council of Economic Advisers (2010).

Because most of the clean energy investments involve grants and contracts that require that proposals be reviewed before funds are expended, not all of the money appropriated for these investments could be spent immediately. Thus, as with the Recovery Act more generally, only a portion of the appropriation has been spent. Over \$31 billion has been obligated and over \$5 billion has been outlayed through the end of 2009.

# Short-Run Macroeconomic Effects of the Clean Energy Investments

Using a macroeconomic model, the Council of Economic Advisers (CEA) estimates that the approximately \$90 billion of Recovery Act investments will save or create about 720,000 job-years by the end of 2012 (a job-year is one job for one year). Projects in the renewable energy generation and transmission, energy efficiency, and transit categories create the most job-years. Approximately two-thirds of the job-years represent work on clean energy projects, either by workers employed directly on the projects or by workers at suppliers to the projects. These macroeconomic benefits make it clear that the Administration has made a tremendous down payment on the clean energy transformation.

<sup>&</sup>lt;sup>4</sup> Obligated means that the money is available to recipients once they make expenditures, and outlayed means the government has reimbursed recipients for their expenditures. Energy-related tax reductions to date are included in the totals obligated and outlayed by the end of 2009.

# OTHER DOMESTIC ACTIONS TO MITIGATE CLIMATE CHANGE

In his first year in office, the President took several other significant and concrete steps to transform the energy sector and address climate change. Significantly, the Environmental Protection Agency (EPA) issued two findings in December 2009. The first finding was that six greenhouse gases endanger public health and welfare. The second finding was that the emissions of these greenhouse gases from motor vehicles cause or contribute to pollution that threatens public health and welfare. These findings do not in and of themselves trigger any requirements for emitters, but they lay the foundation for regulating greenhouse gas emissions.

Following up on these findings, the Administration has proposed the first mandatory greenhouse gas emission standards for new passenger vehicles. The standards are expected to be finalized in the spring of 2010. By model year 2016, new cars and light trucks sold in the United States will be required to meet a fleet-wide tailpipe emissions limit equivalent to a standard of about 35.5 miles per gallon if met entirely through fuel economy improvements. The EPA estimates that these standards will save about 36 billion gallons of fuel and reduce vehicle greenhouse gas emissions by about 760 million metric tons in CO<sub>2</sub>-equivalent terms over the lifetime of the vehicles.

The Administration also proposed renewable fuel standards consistent with the Energy Independence and Security Act (EISA), which requires that a minimum volume of renewable fuel be added to gasoline sold in the United States. Renewable fuels are derived from bio-based feedstocks such as corn, soy, sugar cane, or cellulose that have fewer life-cycle greenhouse gas emissions than the gasoline or diesel they replace. When fully implemented, the standards will increase the volume of renewable fuel blended into gasoline from 9 billion gallons in 2008 to 36 billion gallons by 2022.

The Administration also has been proactive in establishing minimum energy efficiency standards for a wide variety of consumer products and commercial equipment. For instance, standards were proposed or finalized in 2009 for microwave ovens, dishwashers, small electric motors, lighting, vending machines, residential water heaters, and commercial clothes washers, among others. Overall, these actions will reduce energy consumption and, in turn, greenhouse gas emissions. The Energy Information Administration's 2009 Annual Energy Outlook projected that by 2030, higher fuel economy and lighting efficiency standards will contribute to lowering energy use per capita by 10 percent, compared with fairly stable energy use per capita between 1980 and 2008 (Department of Energy 2009b). The 2010 Annual Energy Outlook highlights appliance and building efficiency standards as one reason for lower projected carbon dioxide emissions growth, underscoring the benefits of these regulations (Department of Energy 2009a).

Beginning in 2010, the United States will begin collecting comprehensive high-quality data on greenhouse gases from large emitters in many sectors of the economy (for instance, electricity generators and cement producers). When fully implemented, this program will cover about 85 percent of U.S. emissions. The information supplied will provide a basis for formulating policy on how best to reduce emissions in the future. It will also be a valuable tool to allow industry to track emissions over time. Specifically, these data will make it possible for industry and government to identify the cheapest ways to reduce greenhouse gas emissions.

Finally, the President issued an Executive Order requiring Federal agencies to set and meet aggressive goals for greenhouse gas emission reductions. Importantly, agencies are instructed to pursue reductions that lower energy expenses and save taxpayers money.

## MARKET-BASED APPROACHES TO ADVANCE THE CLEAN ENERGY TRANSFORMATION AND ADDRESS CLIMATE CHANGE

Greenhouse gas emissions, as noted, are a classic example of a negative externality. Emitters of greenhouse gases contribute to climate change, thus imposing a cost on others that is not accounted for when making decisions about how to produce and consume energy-intensive goods. For this reason, policymakers should ensure that the market provides the correct signals to greenhouse-gas emitters about the full cost of their emissions. Once policy has ensured that markets are providing the correct signals and incentives, the operation of market forces can find the most effective and efficient paths to the clean energy economy. The President has included a market-based cap-and-trade approach in his 2010 and 2011 budgets as a way to accomplish this goal. This section describes the basics of this approach, including several potential ways to minimize compliance costs. It then discusses a specific proposal consistent with the President's goals for reducing greenhouse gas emissions.

#### Cap-and-Trade Program Basics

A cap-and-trade approach sets a limit on, or caps, total annual aggregate greenhouse gas emissions and then divides the cap into

emission allowances. These allowances are allocated to firms through some combination of an auction and free allocation.<sup>5</sup> Firms may trade the allowances among themselves but are required to hold an allowance for each ton of greenhouse gas they emit. The aggregate cap limits the number of allowances available, ensuring their scarcity and thus establishing a price in the market for allowances. In this way, a cap-and-trade approach provides certainty in the quantity of emission reductions but allows the price of allowances to fluctuate with changes in the demand and supply.

Creating a market for greenhouse gas emissions gives firms flexibility in how they reduce emissions. Absent other regulatory requirements, a firm subject to the cap can choose to comply by changing its input mix (for instance, switching from coal to natural gas), modifying the underlying technology used in production (using more energy-efficient equipment, for example), or purchasing allowances from other entities with lower abatement costs. Such flexibility reaps rewards. A cap-and-trade program induces firms to seek out and exploit the lowest-cost ways of cutting emissions. It takes advantage of the profit motive and leverages private sector imagination and ingenuity to find ways to lower emissions.

Cap-and-trade programs already have proven successful. The United States has been using a cap-and-trade approach to reduce sulfur dioxide (SO<sub>2</sub>) emissions since 1995. One study found that using a cap-and-trade approach instead of a performance standard to reduce sulfur dioxide emissions caused some firms to move away from putting scrubbers on their smokestacks to cheaper ways of meeting the cap, such as by blending different fuels (Burtraw and Palmer 2004). As a result, compliance costs of the SO<sub>2</sub> cap-and-trade program have been dramatically lower than predicted.

Finally, a cap-and-trade approach promotes innovation. A carbon price will give firms the certainty they need to make riskier long-term investments that could identify novel and substantially cheaper ways to reduce emissions. Evidence shows that pricing sulfur dioxide emissions through a cap-and-trade approach has produced patentable innovations as firms search for ever cheaper ways to abate (Burtraw and Szambelan 2009).

In the case of greenhouse gases, possible innovations range from new techniques to capture and store carbon generated by coal-burning electricity plants, to carbon-eating trees and algae, to the development of new types of renewable fuels. Indeed, such innovation—and the opportunity it provides

<sup>&</sup>lt;sup>5</sup> In his fiscal year 2011 proposed budget, the President supports using allowance revenue to compensate vulnerable families, communities, and businesses during the transition to the clean energy economy, as well as in support of clean energy technologies and adapting to the impacts of climate change.

to make the United States a world leader in clean energy technologies—is a key motivation for the Administration's energy and climate policies.

#### Ways to Contain Costs in an Effective Cap-and-Trade System

There are a wide variety of ways to contain costs within a cap-and-trade framework. For instance, cap-and-trade programs may incorporate banking and borrowing of emission allowances over time, set ceilings or floors on allowance prices, or permit the use of offsets as ways to smooth the costs of compliance over time. A brief review of these mechanisms follows.

Banking and Borrowing. A cap-and-trade approach can be designed to give polluters flexibility in the timing of emission reductions through banking and borrowing. To limit allowance price volatility, sources can make greater reductions early if it is cheaper to do so and bank their allowances for future use. Likewise, firms can manage costs by borrowing against future reductions, allowing them to emit more today in return for more drastic reductions later.

Evidence shows that banking has played a particularly powerful role in helping firms to hedge uncertainty in the costs of the  $SO_2$  cap-and-trade program over time. Anticipating that the cap originally set in 1995 would become more stringent in 2000, firms began to bank allowances for future use soon after the system was put in place. By 1999, almost 70 percent of available allowances in the market had been banked. Once the more stringent cap was in place, the banked allowances were drawn down to meet the cap, with about a 40 percent decrease in the size of the allowance bank between 2000 and 2005 (Environmental Protection Agency 2006).

In contrast, the inability of firms to bank or borrow in Southern California's nitrous oxide market played a significant role in increased price volatility during the State's electricity crisis in 2000 when firms met soaring demand for electricity by running old, dirty generators. One study found that the absence of banking and borrowing was an important contributing factor to the roughly tenfold increase in the price of nitrous oxide allowances, resulting in power plants subject to the cap eventually seeking exemption from the program (Ellerman, Joskow, and Harrison 2003).

**Price Ceilings or Floors.** While banking and borrowing allow firms to smooth costs over time, they may not guard against unexpected and potentially longer-lasting changes in allowance prices caused by such factors as a recession or economic boom, fuel price fluctuations, or unexpected variation in the pace of technological development. Consequently, cap-and-trade systems often include protections against prices that are deemed too high. For example, in the Northeast's greenhouse gas trading system, allowance

prices above certain thresholds trigger additional flexibilities that reduce compliance costs.6

Another way for a cap-and-trade program to mitigate the effects of unexpected changes would be to specify an upper or lower limit, or both, on allowance prices. An upper limit protects firms and consumers from unexpectedly high prices. When the price reaches the upper limit, additional allowances are sold to prevent further escalation. A lower limit on allowance prices ensures that cheap abatement opportunities continue to be pursued. For example, cap-and-trade legislation recently passed by the U.S. House of Representatives reserves a small share of allowances to be auctioned if the price rises above a predetermined threshold and also sets a minimum price for allowances that are auctioned. One study finds that, for a given cumulative emissions reduction, a combined price ceiling and floor can reduce costs by almost 20 percent compared with a cap-and-trade program without any cost-containment mechanisms (Fell and Morgenstern 2009). On the other hand, it is possible that a floor or ceiling can cause total emissions to differ from the legislated cap.

Offsets. Offsets also can be an important cost-containment feature of a cap-and-trade program. Offsets are credits generated by reducing emissions in a sector outside the program; they can be purchased by a firm subject to the cap to meet its compliance obligations. Because greenhouse gases are global pollutants—they cause the same damage no matter where they are emitted—offsets offer the appealing prospect of achieving specified emissions reductions at a lower cost.

The purchase of offsets from the forestry and agricultural sectors could play a potentially important role in reducing the compliance costs of firms subject to the cap (Kinderman et al. 2008; Environmental Protection Agency 2009). And under some cap-and-trade programs, domestic firms may purchase international offsets to meet their compliance obligations. This possibility may encourage a foreign country to build a solar power plant rather than a coal plant so that it can sell the offsets in the U.S. market.

Despite these important advantages, however, it is crucial that the claimed reductions from offsets be real—otherwise the system will effectively provide payments without actually reducing emissions. Europe's experience with a project-based approach to international offsets suggests that concerns about the environmental integrity of claimed

<sup>&</sup>lt;sup>6</sup> Above \$7 per ton (in 2005 dollars), a firm can cover up to 5 percent of its emissions with domestic offsets, up from 3.3 percent. At \$10 per ton (in 2005 dollars plus a 2 percent increase per year), this amount increases to 10 percent of emissions and may include international offsets.

emissions reductions are well founded (Box 9-3).<sup>7</sup> If offsets are going to be included as part of a cap-and-trade program, substantial investments in rigorous monitoring methods, such as combining remote sensing with on-the-ground monitoring, to verify greenhouse gas reductions are crucial.

#### Box 9-3: The European Union's Experience with Emissions Trading

One of the pillars of the President's proposed response to climate change is a cap-and-trade system to reduce U.S. emissions of greenhouse gases. The European Union's Emission Trading Scheme (ETS), the world's first mandatory cap-and-trade program for carbon dioxide emissions, was launched in 2005 to meet emission reduction targets agreed to under the Kyoto Protocol. The first phase of the ETS—from 2005 to 2007—applied to several high-emitting industrial sectors, including power generation, in 25 countries and covered just over 40 percent of all European Union (EU) emissions. Although data limitations and uncertainty over baseline emissions preclude researchers from assessing the precise magnitude of the reductions, one estimate suggests that the ETS reduced EU emissions by about 4 percent in 2005 and 2006 relative to what the level would have been in its absence. Because of the flexibility offered under the cap-and-trade program, these reductions occurred where it was cheapest to achieve them. That said, the ETS offers three important cautionary lessons as the United States explores how best to implement its own cap-and-trade system.

One lesson is the importance of carefully establishing a baseline for current and future emissions, so that the price sends an accurate signal to firms regarding how much to abate and innovate based on the expected future value of reductions. During the first phase of the ETS, EU countries allocated allowances based on firms' estimates of their historic emissions. In April 2006, when monitoring data became available, the data showed that actual emissions were already below the cap. Allowance prices immediately fell from about  $\epsilon$ 30 (\$38) per metric ton to less than  $\epsilon$ 10 (\$13) before settling at  $\epsilon$ 15– $\epsilon$ 20 (\$19–\$25) for the next few months.

The EU experience also demonstrates that distributing nearly all allowances to industry at no cost can lead to large windfall profits. The European Union distributed nearly 100 percent of allowances free to

Continued on next page

<sup>&</sup>lt;sup>7</sup> Cap-and-trade programs that allow project-level offsets are particularly susceptible to crediting activity that would have occurred anyway or that is replaced by high-carbon activities elsewhere (leakage). One way to reduce the potential for leakage is a sector- or country-based framework, in which sectors or governments receive credit in exchange for implementing policies to reduce emissions. The legislation passed by the U.S. House of Representatives includes a sector-based approach to international offsets.

#### Box 9-3, continued

firms subject to the cap in Phase 1 and only auctioned a small portion of allowances for Phase 2 (2008–12). One estimate (Point Carbon Advisory Services 2008) suggests that during Phase 2, electricity generators in Germany will reap the highest windfall profits of all participating EU countries, on the order of €14 billion to €34 billion (\$20 billion to \$49 billion). In countries with low-greenhouse-gas emitters, electricity generators are expected to benefit less. For instance, in Spain, windfall profits are estimated to be about €1 billion to €4 billion (\$1 billion to \$6 billion). In Phase 3 (2013–20), the European Union plans to auction the majority of allowances.

Finally, it is important to ensure that any offsets from domestic and international sources reflect real reductions. Otherwise, they may endanger the environmental integrity of the cap. The ETS allows limited use of project-based international offsets from the United Nations' Clean Development Mechanism (CDM) in place of domestic emission reductions. A review of a random sample of offset project proposals in the CDM program from 2004 to 2007 estimated that "additionality" was unlikely or questionable for roughly 40 percent of registered projects, representing 20 percent of emissions reductions, meaning they would have occurred anyway (Schneider 2007). Although the CDM has worked to improve its accounting procedures over time, the EU's experience demonstrates the importance of designing an offsets program carefully.

#### Coverage of Gases and Industries

Although carbon dioxide made up about 83 percent of U.S. greenhouse emissions in 2008, a cap-and-trade approach that gives firms flexibility in where they reduce emissions, both in terms of the greenhouse gas and the economic sector, can lower firms' compliance costs. One study found that achieving an emission goal by cutting both methane and carbon dioxide emissions rather than carbon dioxide alone could reduce firms' abatement costs in the United States by over 25 percent in the medium run (Hayhoe et al. 1999).

Costs are also affected by the number of industries covered by the cap, with the general principle being that greater coverage lowers the marginal cost of emissions reductions. A recent study comparing alternative ways to achieve a 5 percent reduction in emissions found that the cap-and-trade program's costs to the economy were twice as large when manufacturing was excluded as they were under an economy-wide approach (Pizer et al. 2006).

#### The American Clean Energy and Security Act

In June 2009, the U.S. House of Representatives passed legislation—the American Clean Energy and Security Act (ACES)—that includes a cap-and-trade program consistent with the President's goal of reducing greenhouse gas emissions by more than 80 percent by 2050, and the Senate is currently engaged in a bipartisan effort to develop a bill.

**Projected Climate Benefits.** Based on two analyses of the ACES legislation, U.S. actions would reduce cumulative greenhouse gas emissions by approximately 110 billion to 150 billion metric tons in  $\rm CO_2$ -equivalents by 2050 (Paltsev et al. 2009; Environmental Protection Agency 2009). The EPA estimates that emission reductions of this magnitude, when combined with comparable action by other countries consistent with reducing world emissions by 50 percent in 2050, is expected to limit warming in 2100 to less than 2 °C (3.6 °F) relative to the pre-industrial global average temperature, with a likely range of about 1.0 to 2.5 °C (1.8 to 4.5 °F).

To derive the possible benefits associated with the U.S. contribution to these emission reductions, the CEA calculates that the ACES will result in approximately \$1.6 trillion to \$2.0 trillion of avoided global damages in present value terms between 2012 and 2050 (in 2005 dollars). The value of avoided damages includes such benefits as lower mortality rates, higher agricultural yields, money saved on adaptation measures, and the reduced likelihood of small-probability but high-impact catastrophic events. Further, the benefits will be significantly larger if U.S. policy induces other countries to undertake reductions in greenhouse gas emissions.

**Projected Economic Costs.** The estimated cost of meeting the caps outlined in the ACES legislation is relatively small. Recent research suggests that the ACES will result in a loss of consumption on the order of 1 to 2 percent in 2050 (Environmental Protection Agency 2009; Paltsev et al. 2009). On a per household basis, the average annual consumption loss would be between \$80 and \$400 a year between 2012 and 2050 (in 2005 dollars).

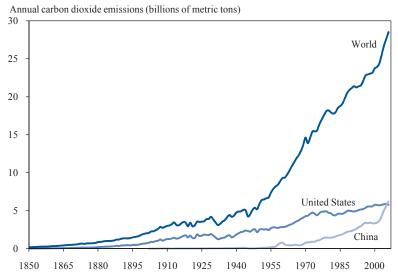
<sup>&</sup>lt;sup>8</sup> The CEA uses estimates of the projected decline in emissions between 2012 and 2050 based on the President's proposed reductions in emissions and uses the central estimate of \$20 a ton for a unit of carbon dioxide emitted in 2007 (in 2007 dollars) that was recently developed as an interim value for regulatory analyses (Department of Energy 2009c). Additionally, it assumes that the benefit of reducing one additional ton of carbon dioxide grows at 3 percent over time and that future damages from current emissions are discounted using an average of 5 percent. Several Federal agencies have used these values in recent proposed rulemakings but have requested comment prior to the final rulemaking, so these estimates may be revised.

#### International Action on Climate Change Is NEEDED

Greenhouse gas emissions impose global risks. As a result, just as U.S. efforts to reduce emissions benefit other countries, actions that other countries take to mitigate emissions benefit the United States. Given the global nature of the problem and the declining U.S. share of greenhouse gas emissions, U.S. actions alone to reduce those emissions are insufficient to mitigate the most serious risks from climate change.

Developing countries such as China and India are responsible for a growing proportion of emissions because of their heavy reliance on carbonintensive fuels, such as coal (Figure 9-3). In 1992, China's carbon dioxide emissions from fossil fuel combustion were half those of the United States and represented 12 percent of global emissions. By 2008, China's carbon dioxide emissions represented 22 percent of global emissions from fossil fuels, exceeding the U.S. share of 19 percent and the European share of 15 percent. China's share of global emissions is projected to grow to about 29 percent by 2030 absent new emission mitigation policies. By contrast, the U.S. share of global emissions is projected to fall to about 15 percent by 2030 even absent new emission mitigation policy. Thus, cooperation by both

Figure 9-3 United States, China, and World Carbon Dioxide Emissions



Notes: The figure includes carbon dioxide emissions from fossil fuel consumption, cement manufacturing, and natural gas flaring. Notably, this figure does not include changes in carbon dioxide emissions from land-use change.

Source: World Resources Institute, Climate Analysis Indicators Tool.

past and future contributors to emissions will be required to stabilize the atmospheric concentrations of greenhouse gases.

In keeping with this goal, the Administration has actively pursued partnerships with major developed and emerging economies to advance efforts to reduce greenhouse gas emissions and promote economic development that lowers emission intensity.

#### Partnerships with Major Developed and Emerging Economies

The President has worked to further a series of international agreements to address climate change. For example, he launched the Major Economies Forum on Energy and Climate to engage 17 developed and emerging economies in a dialogue on climate change. In July, the leaders of these countries agreed that greenhouse gas emissions should peak in developed and developing countries alike, and recognized the scientific view that the increase in global average temperature above pre-industrial levels ought not to exceed 2 °C (3.6 °F). They also agreed to coordinate and dramatically increase investment in research, development, and deployment of low-carbon energy technologies with a goal of doubling such investment by 2015. Finally, the leaders agreed to mobilize financial resources in support of mitigation and adaptation activities, recognizing that the group should be responsive to developing-country needs in this area.

Also in July, leaders from the Group of Eight (G-8) countries agreed to undertake robust aggregate and individual medium-term emission reductions consistent with the objective of cutting global emissions by at least 50 percent by 2050. Additionally, under the Montreal Protocol, the United States jointly proposed with Canada and Mexico to phase down emissions of hydrofluorocarbons, a potent greenhouse gas used in refrigeration, fire suppression, and other industrial activities. This action alone would achieve about 10 percent of the greenhouse gas emission reductions needed to meet the agreed G-8 goal of a 50 percent reduction by 2050.

In December, the Administration worked with major emerging economies, including Brazil, China, India, and South Africa, developed countries, and other regions around the world to secure agreement on the Copenhagen Accord. For the first time, the international community established a long-term goal to limit warming of global average temperature to no more than 2 °C (3.6 °F). Also for the first time, all major economies agreed to take action to address climate change. Under the Accord, both developed and major emerging economies are in the process of submitting their emission mitigation commitments and actions to reduce greenhouse gas emissions. Every two years, developing countries will report on emission mitigation efforts, which will be subject to international consultation and

analysis under clearly defined guidelines. Establishing transparent review of developed and developing country mitigation activities will help ensure that countries stand behind their commitments.

Furthermore, under the Accord, in the context of meaningful mitigation actions and transparency, developed countries committed to a goal of jointly mobilizing \$100 billion a year in funding from a variety of private and public sources for developing countries by 2020. This funding will build on an immediate effort by developed countries to support forestry, adaptation, and emissions mitigation with funding approaching \$30 billion sometime in the 2010 to 2012 timeframe. There will be a special focus on directing this funding to the poorest and most vulnerable developing countries.

#### Phasing Out Fossil Fuel Subsidies

The United States also spearheaded an agreement in September to phase out fossil fuel subsidies among G-20 countries, a goal seconded by countries in the Asian-Pacific Economic Cooperation (APEC) in November. The G-20 also called on all nations to phase out such subsidies worldwide. Fossil fuel subsidies are particularly large in non-OECD countries, such as India and Russia. Twenty of the largest non-OECD governments spent about \$300 billion on fossil fuel subsidies in 2007. Together, this coordinated action to reduce subsidies can free up resources, especially in developing countries, to target other social needs such as public health and education. One model estimates that eliminating fossil fuel subsidies in the major non-OECD countries alone would reduce greenhouse gas emissions by more than 7 billion metric tons of CO<sub>2</sub>-equivalent, enough to fulfill almost 15 percent of the agreed-upon G-8 goal of reducing global emissions by 50 percent by 2050 (Organisation for Economic Co-operation and Development 2009).

In the United States, these subsidies—including tax credits, deductions, expensing practices, and exemptions—are worth about \$44 billion in tax revenues between 2010 and 2019. Their elimination will help put cleaner fuels, such as those derived from renewable sources, on a more equal footing and reduce wasteful consumption of fossil-fuel based energy caused by underpricing. Proper pricing of fossil fuels will also help reduce reliance on petroleum, thus enhancing energy security and aiding in the achievement of climate mitigation goals.

#### Conclusion

Today's economy is dependent on carbon-intensive fuels that are directly linked to an increase in global average temperature. Continued reliance on these fuels will have a range of negative impacts, including increased mortality rates, reduced agricultural productivity in many locations, higher sea levels, and the need for costly adaptation efforts. For these reasons, a clean energy transformation is essential.

Through his comprehensive plan, the President has set the country on course to achieve this goal. He has taken several significant and concrete steps to transform the energy sector and address climate change through the American Reinvestment and Recovery Act and through targeted regulation. To address externalities associated with greenhouse gas emissions, the President has proposed a market-based cap-and-trade approach. These combined efforts will stimulate the research and development necessary to advance new clean energy technologies. Because of the global nature of the climate change problem, the Administration is also actively pursuing partnerships with other countries to advance efforts to transition the world to clean energy and reduce greenhouse gas emissions.



#### CHAPTER 10

# FOSTERING PRODUCTIVITY GROWTH THROUGH INNOVATION AND TRADE

A mericans have always believed in building a better future. Each generation has strived to pass on higher standards of living to their children than they themselves experienced. And for most of American history, this goal has been realized. Per capita income has risen strongly for most of the past two centuries.

Such economic growth stems from a number of factors. Investment in skills and education, or human capital, is a key determinant. The United States has a long history of investing in people, and this has enabled American workers to be among the most productive in the world. Investment in physical capital is also important. The tremendous accumulation of machines, buildings, and infrastructure has been a source of America's prosperity, and times of particularly great investment, such as the 1950s and 1960s, have been times of particularly rapid advances in standards of living.

Because investing in people and capital is important to the maintenance and growth of standards of living, the President has fashioned an ambitious agenda of improvements in education, incentives for investment, and financial regulatory reform to ensure that we have the financial system needed to support such investment. These initiatives have been described in detail in earlier chapters.

But as important as investments in labor and capital have been and will continue to be, they are not the only sources of growth. A third, more amorphous factor has also played a central role in American economic growth: advances in the overall productivity of that labor and capital. One need only think of a few of the technological changes of the past century—the airplane, antibiotics, computers, fiber-optic cables, and the Internet—to see that technological discovery and innovation are central to improved standards of living. Such innovations not only make us richer as a country, they have the potential to fundamentally alter the very way we live our lives and interact with one another.

As discussed throughout this *Report*, in the past decade American economic growth has slowed in important ways. American families saw their median income actually fall from 2000 to 2006. An important part of restoring growth and increases in standards of living is spurring innovation and increases in productivity. American firms and universities will naturally play the leading role in this endeavor. But that does not mean government has no role to play. Indeed, overwhelming evidence shows that innovation creates positive "externalities"—benefits for others beyond the individuals or firms who originally produce new ideas. Since inventors do not reap the full rewards, on its own the market will produce less innovation than is optimal. Public policy therefore has a powerful role to play in fostering pursuit of the myriad possibilities for scientific, technical, and analytical advances.

At its best, trade between regions of the country and across borders can also be an engine of growth. Trade has the potential to allow the U.S. economy to expand output in areas where it is more productive and to enable higher-productivity firms to expand. Access to a world market encourages American firms to invest in the research needed to become technological leaders. Through these routes, a free and fair trade regime can play an important part in lifting living standards in the long run.

Based on an understanding that progress springs from achieving the proper balance between generous rewards for the creation of new ideas and encouraging the best of those ideas to spread widely, the Administration has formulated a comprehensive "innovation agenda" that reaches far beyond the traditional scope of science and technology policy. This agenda touches everything from improvements in the Patent and Trademark Office, to increased government investments in research and development (R&D), to engaging the world economy in ways that ensure that the United States achieves the maximum benefits from trade's productivity-enhancing potential. This chapter discusses the key components of the agenda in detail.

All advances in productivity, whether from scientific breakthroughs, changes in the organization of firms, or increased international trade, involve losers as well as winners. Because productivity growth is the critical source of improved standards of living, the most effective way to address the painful impacts for those harmed by progress is not to stifle new ideas or trade. Rather, it is to build a robust system of support that can help ease the transition from employment in declining firms and industries to jobs in new, higher-paying, higher-productivity areas. Even more important are broad-based policies that ensure that the gains from rising productivity are widely shared: progressive taxation, a health care system that provides security and stability, a strong educational system, and a secure social safety net.

For too many years, our Nation has ignored necessary reforms in these broad-based policies and underinvested in areas such as health care and education, which are essential to ensuring that middle-class families will benefit from productivity advances. That is why the Obama Administration has set as a central economic priority rebuilding our economy on a firmer foundation. The Administration's innovation agenda must go hand in hand with progress in those areas as well.

#### THE ROLE OF PRODUCTIVITY GROWTH IN DRIVING LIVING STANDARDS

In the long run, the critical determinant of living standards is labor productivity—the amount of goods and services produced by an average worker in a fixed period of time, such as an hour or a 40-hour week. Figure 10-1 provides striking visual confirmation of this hypothesis. It shows that over U.S. history since the early 20th century, sustained increases in labor productivity have translated nearly one-for-one into increases in income per person.

2005 dollars Index (1992=100) 40,000 160 35,000 140 Per capita income 30,000 120 (left axis) 25,000 100 Productivity 20,000 80 (right axis) 15.000 60 10,000 40 5.000 20 0 1991 1911 1921 1931 1941 1951 1961 1971 1981

Figure 10-1 Non-Farm Labor Productivity and Per Capita Income

Note: Productivity represents total output per unit of labor, 1901-1946, and non-farm business sector only, 1947-2008.

Sources: Department of Commerce (1973); Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 7.1; Department of Labor (Bureau of Labor Statistics), Productivity and Costs Table A.

The importance of labor productivity to living standards may seem obvious, or even tautological, but it is not. In principle, increases in income per person could come not from more output per unit of labor input, but from more labor input per person—that is, from increases in the fraction of the population that is working or increases in each worker's hours. But both the historical evidence from the United States and the evidence from across a wide range of countries show that differences in labor input per person account for at most a small fraction of income differences.

#### Recent Trends in Productivity in the United States

Since labor productivity is the key driver of standards of living in the long run, it is important to discern the underlying trends in productivity. This task is complicated by the fact that in the short run, productivity depends on more than those underlying trends. It is powerfully influenced by the state of the business cycle, as well as by other factors (including simple measurement error) that leave no lasting mark on productivity.

Figure 10-2 shows the growth rate of labor productivity from four quarters earlier over the last 62 years. One immediate message is that although the overall pattern of productivity is strongly upward (as shown clearly by Figure 10-1), there is enormous short-run variation in productivity growth.

4-quarter percent change, seasonally adjusted annual rate

10

8

4

1948 1953 1958 1963 1968 1973 1978 1983 1988 1993 1998 2003 2008

Figure 10-2 Labor Productivity Growth since 1947

Note: Grey lines represent NBER business cycle troughs.

Source: Department of Labor (Bureau of Labor Statistics), Productivity and Costs Table A.

A more subtle message is that the average or trend rate of productivity growth is not constant but changes substantially over extended periods. It is conventional to divide the era from the beginning of the sample until about 1995 into two periods: the "immediate postwar" period from 1947 through 1972, and the "productivity growth slowdown" period from 1973 through 1995. In the immediate postwar period, the average rate of productivity growth was 2.8 percent per year. During the productivity growth slowdown, it was only 1.4 percent.

This division into different periods lets one see the cumulative importance of even seemingly modest changes in productivity growth. For example, if the high productivity growth of the immediate postwar period had continued through 1995 instead of slowing, the level of productivity in 1995—and hence standards of living—would have been more than one-third higher than they actually were.

The pattern of productivity growth since 1995 is somewhat complicated. From 1996:Q1 to the last available observation (2009:Q3), it averaged 2.7 percent per year, almost equal to its rate over the immediate postwar period. But that rapid growth was concentrated in the first part of the period. In the first eight years (1996:Q1 to 2003:Q4), productivity growth averaged 3.3 percent; in the four years before the business cycle peak (2004:Q1 to 2007:Q4), it averaged only 1.7 percent. A four-year period is too short to confidently determine underlying trends. But productivity growth in the years leading up to the recession was not strong enough to generate robust increases in standards of living.

A final pattern revealed by Figure 10-2 is a relationship between productivity growth and the business cycle. Productivity growth tends to fall during recessions and surge near their ends (marked by the vertical lines in Figure 10-2). This pattern has been operating strongly in the current recession. Productivity growth averaged less than 1 percent at an annual rate over the first five quarters of the recession, but then surged in 2009:Q2 and 2009:Q3, and appears to have remained high in 2009:Q4.

This recent experience highlights the importance of distinguishing between cyclical movements in productivity and longer-term movements: the pattern in productivity growth in 2009 largely reflects the fact that employment moves more slowly than production over the business cycle. The sluggishness of employment growth has meant that even as output reached its low point and began to recover, employment continued to decline. This cyclical improvement in productivity is obviously of a different character than the secular improvements that are the source of long-run increases in standards of living. Over the course of 2009, standards of living clearly did not follow productivity closely. But once the cyclical dynamics

play themselves out, the usual long-term role of productivity growth in driving income growth is bound to reassert itself. An important goal of policy is to make the long-term path of productivity as favorable as possible.

#### Sources of Productivity Growth

Productivity growth is the overwhelming determinant of the progress of economic well-being over extended periods. It is therefore imperative to understand what determines productivity growth. Three sources have been identified as key.

The first source is the accumulation of physical capital—the machines, tools, computers, factories, infrastructure, and so on that workers use to produce output. Each year, some of our Nation's economic output takes the form of these capital goods. When workers have more or better capital to work with, they are more productive.

The second source is the accumulation of human capital—workers' education, skills, and training. The accumulation of human capital is just as much an investment as the accumulation of physical capital is. When some of the economy's output takes the form of physical capital goods rather than consumption, we are forgoing some consumption today in exchange for the ability to produce more in the future. Likewise, when students and teachers are in a classroom, or when an experienced worker is taking time to train a new hire, resources that could be used to produce goods for current consumption are being used instead for activities that increase future productive capacity. And just as a worker with better equipment is more productive, so too is a worker with more skills.

The third source of productivity growth is increases in the amount that can be produced from given amounts of physical and human capital. This factor goes by various names, such as "total factor productivity growth" or "the Solow residual." It encompasses all the forces that cause changes in how much an economy produces from its stocks of physical and human capital. Most obviously, it encompasses advances in knowledge and technology. These advances in knowledge and technology allow factory workers to build better automobiles and electronics from the same raw materials; they allow doctors to provide more accurate diagnoses and prescribe better treatments in the same office visit; and much more.

But total factor productivity growth includes more than advances in knowledge and technology. For example, if an economy faces an increase in crime, individuals may devote more of their skills and physical capital to protecting the goods they have rather than producing more goods, and so total factor productivity growth may be low or even negative. If a country switches from central planning to a market-based economy, then

workers and capital are likely to be allocated more effectively, and so output given the economy's stocks of physical and human capital may increase greatly. Changes in these types of "organizational capital" (or "institutional" or "social" capital) are potentially critical determinants of total factor productivity growth.

Research has not just identified changes in these three factors (physical capital, human capital, and total factor productivity) as critical determinants of productivity growth; it has also come to a fairly clear view about their relative importance. Perhaps surprisingly, the ranking of the three factors appears to be the same whether one is trying to understand the enormous growth in productivity over extended periods in the United States (for example, Jones 2002), or the vast differences in the level of productivity across countries (for example, Hall and Jones 1999).1

The factor that is most obvious and easiest to quantify physical capital accumulation—turns out to be only moderately important. Differences in the fraction of output devoted to physical capital investment account for some portion of both long-run productivity growth and crosscountry productivity differences, and increases in investment can have a significant impact on productivity growth, and hence on standards of living. At the same time, the evidence suggests that the other factors are even more important.2

One of those more important factors is human capital accumulation. Increases in the education and skills of the workforce play a substantial role in the long-term growth of labor productivity, and cross-country differences in human capital per worker are important to cross-country differences in labor productivity. Thus, increases in human capital investment through a stronger educational system and greater educational attainment at all levels, together with lifetime learning, provide another powerful route to raising productivity growth and standards of living.

The most important determinant is not physical or human capital accumulation, but changes in how much can be produced with them—that is, total factor productivity growth. Again, this finding applies to both longterm growth and cross-country differences. At an intuitive level, this result is not surprising. It seems very plausible that the most important reason we are so much more productive than our forebears is that, for reasons ranging

<sup>&</sup>lt;sup>1</sup> See also Klenow and Rodríguez-Clare 1997; Hendricks 2002; Caselli 2005; and Hsieh and

<sup>&</sup>lt;sup>2</sup> There is a subtlety here. When total factor productivity or human capital improves, the result is higher output, which then leads to more physical capital investment if the fraction of the economy's output that is invested does not change. The decompositions that find a moderate role for physical capital assign these indirect effects of total factor productivity and human capital investment to those factors, and not to physical capital. If those effects are instead assigned to physical capital, its importance increases greatly.

from advances in basic scientific knowledge to improved ways of organizing the workplace, we have found vastly better ways of producing output from a given set of inputs. Likewise, it is likely that a key reason the United States outperformed the Soviet Union economically in the postwar period was not that the United States was better at channeling its productive capacity into producing capital goods and its children into education (both of which the Soviet Union did on a very large scale), but that the United States' free-market institutions led it to produce more from its inputs, and led to myriad innovations that widened the productivity gap over time.

This discussion implies that in order to foster improvements in standards of living, policy should foster investment in physical capital, investment in human capital, and crucially, improvements in total factor productivity. Physical and human capital investment are discussed in earlier chapters—most notably Chapter 4 (as well as Chapters 5 and 6) in the case of physical capital investment, and Chapter 8 in the case of human capital. The remainder of this chapter turns to measures to improve total factor productivity. Such improvements in total factor productivity can be described broadly as "innovations."

## Fostering Productivity Growth Through Innovation

Because total factor productivity reflects all determinants of labor productivity other than physical and human capital, it has a wide range of elements. As a result, there are many avenues along which well-designed policies can work to improve total factor productivity. It is for this reason that the Administration has proposed a comprehensive innovation agenda (Box 10-1).

#### Box 10-1: Overview of the Administration's Innovation Agenda

On a September 21 visit to New York's Hudson Valley Community College, President Obama presented the first comprehensive description of the Administration's Innovation Agenda, the conceptual framework underpinning the wide range of initiatives that the Administration has undertaken that share a common aim of fostering innovation.

The Agenda has three elements. The first is a commitment to invest in the building blocks of innovation, including basic scientific research and infrastructure, as articulated in detail in the body of this chapter.

Continued on next page

#### Box 10-1, continued

The second is a recognition of the vital role that competitive markets and a healthy environment for entrepreneurial risk-taking play in spurring innovation; reform of the Patent Office, improving the accessibility and usefulness of government statistics, and increasing the predictability and transparency of government policy are all parts of this effort. The final part of the agenda is a particular focus on innovation targeted toward specific national priorities, including the development of alternative energy sources, reducing costs and improving medical care through the use of health information technology, the creation of a "smart grid" that will allow more efficient use of existing energy generation capacity, and initiatives aimed at inventing cleaner and more fuel-efficient transportation technologies.

The Agenda builds on over \$100 billion of funds appropriated in the American Recovery and Reinvestment Act of 2009 for the support of innovation, education, and technological and scientific infrastructure. It also encompasses directives to regulatory and executive branch agencies designed to help them refocus their missions to support the Agenda in whatever ways are most appropriate to their usual activities. A final key tool is the commitment to science-based, data-driven policymaking that brings to bear all the intellectual, statistical, informational, and analytical resources necessary to make sure that government policies achieve their stated aims as efficiently and effectively as possible.

#### The Importance of Basic Research

One uncontroversial conclusion of work on the determinants of productivity growth is that the payoff to investment in basic scientific and technological research has been vast, at least in some fields and over the long run. Breakthroughs on fundamental questions of physics, chemistry, biology, and other sciences have powered the transformations of economic production that underlie much of the productivity growth measured (however imperfectly) in economic statistics (Nordhaus 1997; Nelson and Romer 1996).

The Administration has taken that lesson to heart in its support for basic research in science and technology, especially in two areas where the need for progress is pressing: energy and biomedical research. The Department of Energy has created a new Advanced Research Projects Agency-Energy (ARPA-E), with the objective of pursuing breakthroughs

that could fundamentally change the way we use and produce energy. In the medical and biological sciences, the Administration has ended restrictions on Federal funding for embryonic stem cell research, and in September 2009 it announced \$5 billion in grants under the American Recovery and Reinvestment Act to fund cutting-edge medical research.

Across all areas, the Recovery Act included \$18.3 billion for research funding. Because the Administration's commitment to evidence-based policymaking will require substantial improvements in the ability to reliably measure economic outcomes, the Act committed \$1 billion to the 2010 Census as a first step in a longer-term effort to revamp the Nation's statistical infrastructure—a process that will not only improve policymaking but will also help private businesses make better decisions (for example, about where to locate new production or sales facilities).

In addition, the fiscal year 2011 budget enhances research funding in numerous ways. First, it continues to work to fulfill the President's pledge to double the budgets of three key science agencies (the National Science Foundation, the Department of Energy's Office of Science, and the Department of Commerce's National Institute of Standards and Technology). Second, it boosts funding for biomedical research at the National Institutes of Health by \$1 billion to \$32.1 billion. Third, it reinvigorates climate change research through increased investments in earth observations and climate science in agencies such as the U.S. Geological Survey and the National Oceanic and Atmospheric Administration. Fourth, it funds potentially groundbreaking discoveries with a boost to Department of Defense basic research and \$300 million for the Department of Energy's ARPA-E program. Finally, it supports world-class agricultural research for national needs such as food safety and bioenergy with \$429 million for the competitive research grants program in the Department of Agriculture's new National Institute of Food and Agriculture.

As part of the innovation agenda, and to ensure that the increased research funds are spent well, the Administration has also instructed agencies to work on constructing a set of systematic tools to track the long-term results of federally sponsored research, such as journal articles published and cited, patents obtained, medical advances achieved, or other measurable consequences (particularly in areas of national importance such as health or energy). Although the fruits of this effort will not be available for a number of years, the project is one of the most promising in the Administration's efforts at turning the evaluation of scientific research into a "science of science."

#### Private Research and Experimentation

Scientific breakthroughs are only the first step in producing improvements in total factor productivity and hence living standards. Benjamin Franklin's discovery that lightning was a form of electricity did not produce an immediate reduction in damage from electrical storms; much further research and development was necessary to turn that discovery into the lightning rod (though by late in his life Franklin was able to observe a flourishing industry that had been built upon his insight).

Measuring the returns to the economy as a whole from private research and experimentation is almost as formidable a challenge as measuring the returns to basic research. But most studies find that aggregate returns to such spending are much higher than the returns to ordinary investments in physical capital. Some work estimates the aggregate returns at 50 percent or higher (Hall, Mairesse, and Mohnen 2009).

These returns are mostly not received by the firms or individuals who pay for the work, because the ideas ultimately benefit others in many ways whose value is not captured through markets. Economic theory provides a clear prescription for policy toward activities that have measurable positive externalities: the activities should be subsidized.

This is the logic behind the research and experimentation (R&E) tax credit that has been an off-and-on part of the tax code for many years. But the credit's effectiveness has been hampered by chronic uncertainty about how long it will remain in force. Partly for budgetary accounting reasons, the R&E tax credit has been treated for many years as a temporary provision that was scheduled to expire at some point in the near future. Yet each year (except for 1995), Congress and the President have agreed (sometimes at the last minute) to extend the credit. The effect has been to substantially increase the uncertainty that firms face about the costs that they will end up paying for their research and experimentation projects; this uncertainty can have a serious negative effect on research, which is already a highly uncertain investment. The problem is particularly acute for the kinds of projects that might be expected to have the highest returns: long-term projects that require continuing expenditures over many years. For such projects, uncertainty about whether the R&E tax credit will be in place through the duration of the project can make the difference between pursuing or abandoning the research. The Administration therefore supports efforts in Congress to make the R&E tax credit permanent, so that the highest-return long-run projects can be confidently started without uncertainty about whether the credit will be there for the duration.

The importance of both public and private R&D spending for innovation and improvements in standards of living forms the basis for a key Administration goal. In a speech in May 2009 to the National Academy of Sciences, the President articulated the ambition of boosting total national investment in research and development to 3 percent of gross domestic product. As can be seen from Figure 10-3, this is a rate that would exceed even the peak rates reached in the 1960s. As described earlier, the American Recovery and Reinvestment Act began the Federal contribution with a historic increase in direct funding for scientific and technological research, as well as major investments in technological and scientific infrastructure detailed below. But reaching the President's goal will require not just an increase in the Federal Government's role; equally important is the need for a resurgence of entrepreneurial and corporate investment in research. The Administration's consequent focus on creating the best possible environment for private sector innovation is one of the many novel aspects of its innovation agenda.

Percent 3.0 2.9 2.8 2.7 2.6 2.5 2.4 2.3 2.2 2.1 2.0 1960 1970 1980 1990 2000

Figure 10-3 R&D Spending as a Percent of GDP

Note: Data for 2008 are preliminary. Sources: National Science Foundation, Science and Engineering Indicators 2010 Tables 4-1 and 4-7.

#### Protection of Intellectual Property Rights

A subsidy like the R&E credit is one way to address underinvestment caused by the fact that the inventor of a new technology does not reap all the benefits of that invention. An older approach is embodied in the American

system of patents and copyrights that had its origins in the Constitution (and before that, in the English legal system).

One leading scholar (Jones 2001) has argued that the invention of ways to protect intellectual property may have been a trigger for the industrial revolution that led to the modern era of economic growth. In this interpretation of history, the creation of a legal system that could protect intellectual property may have been one of the most important "technological" developments in human history. Though this interpretation can be debated, the practical implication is surely correct: achieving the proper balance between the private and the societal rewards from innovation is a critical element in creating and sustaining long-run economic growth.

The existing U.S. patent system developed over many years in response to the needs of an industrial economy. That system has been under considerable strain in the past couple of decades as the United States and the world have moved increasingly toward a "knowledge-based" economy. The Patent and Trademark Office (PTO) has been required to answer many questions that could not have been imagined in 1952 when the current patent statute was written, such as how and whether to grant patents for human genes or for Internet advertising tools. Further, the sheer volume of information necessary to evaluate a patent application, which might now arrive from any country in the world and might rely on ideas that even an expert might be unfamiliar with, has made the PTO's job increasingly daunting. As a result of these challenges, the agency currently faces a backlog of over 700,000 unexamined applications. Waiting times on a patent application can extend to four years or more. The costs that such waiting times impose on firms are substantial; and delays impose a particularly large burden on startup firms that rely on patents to attract venture capital funding—precisely the kind of firms that the Administration's innovation agenda is particularly designed to help.

While the PTO has made progress in responding to these problems, most notably by developing a "peer review" system modeled on academic publishing, observers agree that the patent system is in need of an overhaul. The Administration has endorsed the aims of bills pending in Congress that would address many of these problems, particularly by giving the PTO authority to set fees that cover the cost of application processing, and also by barring diversion of fees to projects unrelated to PTO activities. The PTO is also in the process of creating an Office of the Chief Economist, which will provide a mechanism for better integration into patent policy of economic research on how to properly reward innovation without stifling the widespread use of good ideas.

In recognition of the role of innovation and intellectual property in advancing continued U.S. leadership in the global economy, in 2008

Congress created the Office of the United States Intellectual Property Enforcement Coordinator. This office is charged with creating and implementing a strategy to coordinate and enhance enforcement of intellectual property rights in the United States and overseas. By ensuring that the Administration has a coordinated strategy, this office will work to ensure that the effort of American workers and businesses to produce creative and innovative products and services is valued fairly around the world.

#### Spurring Progress in National Priority Areas

Much of the Administration's innovation agenda is aimed at creating a general economic environment that encourages innovation across the board. But the Administration has also focused special attention on certain areas where particular national needs are urgent. These include investments in building a "smart grid" to enhance the reliability, flexibility, and efficiency of the electricity transmission grid; research on renewable energy technologies like wind, solar, and biofuels; and support for research into advanced vehicle technologies. These investments are motivated not only by the perception that technological breakthroughs are possible and would be highly valuable, but also by the enormous potential benefits that such breakthroughs could have in terms of enhancing national security, mitigating pollution, and stemming climate change. These are also investments that have a direct impact on creating high-paying, durable jobs—something that is particularly valuable at a time of high unemployment. Thus, as noted in Chapter 9, investments in the clean energy transformation involve two layers of externalities: innovators fail to receive the full economic benefits of their breakthroughs as measured by market valuation, and the market valuation itself understates the true social benefits of the breakthroughs.

Another priority, given the looming threat that health care spending poses to the Federal budget, is developing technologies for measuring and monitoring health more efficiently. Through the Recovery Act, the Administration has allocated substantial funds to development of a 21st-century system of medical recordkeeping that should jump-start work in this area.

#### Increasing Openness and Transparency

To noneconomists, the idea that the legal system or the Patent Office is a form of technology seems a bit of a stretch. Even more challenging is the idea that a society's overall degree of openness and transparency may be a key determinant of economic progress. Yet a substantial body of economic research has found that measures of openness and transparency

in governmental policymaking processes have a strong association with growth outcomes.

There are several reasons why this may be so. One fairly simple one is that openness and transparency make it more difficult for special interests to achieve their aims at the expense of the public. Another view, which is not in conflict with the first, is that the process of requiring policies to be explained and encouraging wide discussion about them yields new ideas and improvements of existing ideas that might not otherwise have occurred even to the cleverest and most well-motivated public servant.

A more speculative proposition is that a commitment to openness and transparency on the part of the government is a form of investment in the kind of "organizational capital" described earlier. Economic research has found a strong correlation between measures of governmental transparency or openness and private sector productivity. Interpretations of this relationship are a matter of debate; some scholars argue that higher levels of productivity and income cause citizens to demand better government; others argue that both governmental openness and private productivity are a reflection of deeper unmeasured forces; and some advocate the straightforward view that open and transparent government has a direct effect in producing greater private sector efficiency.

The Administration's commitment in this area has been on full display in the unprecedented openness and transparency surrounding implementation of the Recovery Act. The most obvious manifestation of this transparency is the creation of the independent Recovery Accountability and Transparency Board charged with monitoring and reporting on the government spending under the Act. Likewise, the requirement that recipients report on job creation and retention each quarter provides a new source of information on the employment impact of the Act. The knowledge generated by the data collection and measurement under the Recovery Act will be valuable in assessing economic policymaking for years to come.

The principles of openness, accountability, and public input are far broader than just the Recovery Act, however. The Administration's "open government" initiative aims to harness the power of the Internet to bring the same commitment to transparency and accountability to every part of the Federal Government. New tools for this purpose are being developed not only by government agencies but by the private sector, by open source software programmers, and by citizens around the country. It seems plausible that eventually the new kinds of openness and transparency made possible by new forms of technology will have the same kinds of positive effects on growth that openness and transparency seem to have had across countries in the past.

## TRADE AS AN ENGINE OF PRODUCTIVITY GROWTH AND HIGHER LIVING STANDARDS

Specialization has long been understood to be an important source of productivity growth. In his *Wealth of Nations*, Adam Smith (1776) extolled the virtues of specialization in the pin factory where many different specialized laborers were involved in producing a simple pin. Perhaps the most important form of specialization is a transition from a subsistence society, where people produce all their consumption goods themselves, to a market economy, where people focus on particular skills and occupations and depend on purchases for their daily needs. Another significant transition, though, is one from a country that must produce everything its inhabitants want to consume toward one that specializes in particular goods and services and sells them on global markets for other goods and services.

Increases in trade and increases in GDP tend to go hand in hand, but untangling whether economic growth is generating more trade or whether trade is lifting growth is a difficult task. Creative research, however, has been able to demonstrate the causal role trade plays in increasing the amount a society can produce. One study demonstrated that countries that were geographically better suited for trade (because of their proximity to trading partners, access to ports, and the like) have higher levels of GDP (Frankel and Romer 1999). Another demonstrated that the same relationship can be seen across time (Feyrer 2009).<sup>3</sup>

Initially, trade was about introducing products (such as spices) from one market to another, providing consumers with choices they previously did not have. Still today, trade can offer consumers different goods and different varieties of products already available to them and bring new technology from other countries. By allowing countries to specialize based on skills or endowments, trade can also allow countries to improve their standards of living. Trade can also help a country increase its overall output by allowing firms or industries to take advantage of economies of scale or by encouraging the growth of more productive firms. Thus, trade has the potential to increase the overall quantity of goods and services that a given economy can produce with its resources—and hence increase the overall standard of living—making global commerce a cooperative, not a competitive venture. A clear rules-based system with enforcement of those rules can help ensure that trade is mutually beneficial.

<sup>&</sup>lt;sup>3</sup> The transition from sea to air traffic for much of the world's trade has meant more of a collapsing of distance for some nations than others. Because some sea-based trading routes are inconvenient, a shift to air transport has increased trade more for some nations than others. Controlling for other features, countries whose trade has increased due to this transition have grown faster than other countries.

While the act of specializing should lift living standards over time, it requires shifting resources from one sector to another, and so can generate short-run dislocations. As a result, it is essential to strengthen both targeted and more general policies that seek to ensure all can benefit from increases in trade. For this reason, after this section describes the productivity-enhancing benefits trade can generate for the U.S. economy, the following section discusses how progressive taxation and a strong social safety net are crucial counterparts to productivity change of all types.

#### The United States and International Trade

Because of its massive size, the United States can engage in a considerable amount of specialization and trade within its own economy. Historically, foreign trade as a share of GDP has been smaller in the United States than in most other countries. In 1970, exports as a share of GDP for the average member of the Organisation for Economic Co-operation and Development (OECD) was 25 percent, while in the United States, the share was just 6 percent. By 2008, exports had increased to 13 percent of the U.S. economy (see Figure 10-4). Although that share is still relatively small, the increase in trade over the past four decades has meant that even in a large country like the United States, global commerce is an important part of the economy and—as discussed below—can be an important source of productivity growth.

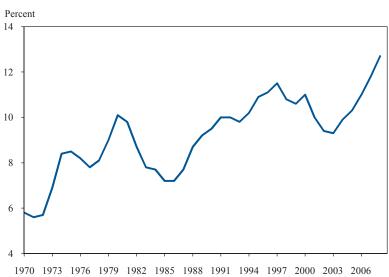


Figure 10-4
Exports as a Share of GDP

Source: Department of Commerce (Bureau of Economic Analysis), National Income and Product Accounts Table 1.1.10.

Millions of American workers contribute to the production of goods and services that are exported to foreign markets, and their jobs, on average, pay higher wages than a typical job. The Commerce Department estimates that in 2008 U.S. exports represented the work of roughly 10 million American workers. The majority of these export-supported jobs were related to the export of goods; millions more were related to services exports and nearly a million were related to agricultural exports. The manufacturing sector is particularly connected to exports; 20 to 30 percent of manufacturing employment in the United States in 2008 was supported by exports. These estimates represent the number of job-equivalents based on total hours needed to produce the volume of exports. Because few workers produce exclusively exports or inputs for exports, the number of workers who are involved with exports is likely much larger than 10 million.

Currently, the U.S. economy is far from full employment, and any increased production could generate an increase in jobs. Chapter 4 discusses how an increase in exports may be an important part of GDP growth in the medium term. In the long run, though, the principal contribution of an increase in the trade share will be the increase in productivity and living standards it can generate. Thus, the rise in the export share of the economy from 6 percent in 1970 to 13 percent today represents specialization, as some workers who produced goods for domestic use have moved into export sectors. The following sections describe the ways in which trade can increase productivity.

#### Sources of Productivity Growth from International Trade

Productivity growth can come from a number of channels. Trade can allow increased specialization; it can allow increased scale of production; and it can allow more productive firms to grow rapidly, increasing their share of the economy.

Specialization. In the United States, a primary source of trade-related productivity growth is specialization. The concept of Ricardian comparative advantage—that nations specialize in producing the goods that they can produce cheaply relative to other goods—can be seen in a number of aspects of U.S. trade. America makes far more aircraft, grain, plastics, and equipment (optical, photographic, and medical) than it consumes. In these product areas, the United States has a substantial trade surplus, totaling over \$100 billion in 2008. Conversely, the United States produces less electrical equipment, clothing, furniture, and toys than it consumes, and therefore imports more of these goods than it exports. If America cut its production of aircraft, where it has a comparative advantage, by the \$50 billion it

currently exports on net and instead tried to produce more of the goods we currently import, productivity would likely be lower.

Specialization also takes place within industries. For example, within the broad category of "electrical machinery and equipment," America imports telephones (including cell phones) and computer monitors, but exports electronic integrated circuits. Specialization can even take place within more narrow product classifications (for example, computer memory). Advanced countries with higher wages tend to produce and export more high-quality products even as they import lower-cost, lowerquality products from abroad in the same product type. Economists refer to this within-product differentiation as the "quality ladder," and extensive research in recent years has noted this pattern of specialization within products (Schott 2004). Over time, high-skill countries climb the quality ladder, making higher-quality products and increasingly importing low-skill products.

For example, consider the category "electrically erasable programmable read-only memory." The United States both imports and exports billions of dollars worth of products in this category every year, but the average unit price of the exports is roughly three times the average unit price of the imports. The U.S. products may have bigger memories with more complex production processes or be of higher quality than the cheaper imports. In any event, the imports and exports do not appear to be overlapping. Again, such a division of labor allows for higher standards of living across the world.

Intra-Industry Trade. Beyond specialization, trade can generate productivity advances in a number of ways. One important channel is that trade can allow companies to achieve a scale of production that they could not attain by selling just to the local market, thus increasing their productivity. Within any given economy, there is a limit to the quantity of a specific good that the domestic market will want to consume. The ability to manufacture more of a product than domestic consumption supports and exchange it for other products—even ones that are extremely similar to the exported good—can be quite beneficial. It results in economies of scale that can be internal to a firm, where one company grows quite large and productive at making one good, or to a region, where a particular good tends to be made in a given physical location as a substantial amount of expertise builds up there.

Trade in which different quality or simply different brand products are traded in both directions, known as intra-industry trade, represents between 40 and 50 percent of trade in the world economy. For the manufacturing industry of the United States, that figure is even higher. As Figure 10-5 shows, intra-industry foreign trade moved from roughly 65 percent of U.S.

manufacturing trade in the 1980s to roughly 75 percent in 2001. Frequently, this means two very similar countries engaging in trade with each other. Five of the seven largest U.S. trading partners are advanced economies; in fact, despite some observers' focus on low-wage country imports, roughly 50 percent of U.S. imports come from other advanced economies. These countries often have similar endowments of labor and are generally able to use the same technology, but narrow specialization within product classes, different brands, or differences in resource allocations allows for productive exchange.

Figure 10-5 Intra-Industry Trade, U.S. Manufacturing

Source: Organisation for Economic Co-operation and Development, Structural Analysis (STAN) database.

1992

1995

1998

2001

1989

Firm Productivity. Trade can also allow productive firms to grow relative to less productive firms as they increase their scale. A new literature on "heterogeneous firms" has focused less on differences in endowments or comparative advantage across countries and more on how firms within an economy respond to trade. A crucial insight in this literature is that most firms do not engage in trade, but those that do are on average more productive and pay higher wages. This literature shows that when a country opens to trade, more productive firms grow relative to less productive firms, thus shifting labor and other resources to the better organized firms and increasing overall productivity. Even if workers do not switch industries, they move from firms that are either poorly managed or that

1980

1983

1986

use less advanced technology and production processes toward the more productive firms. Thus, firm-level evidence demonstrates that trade allows not only economy-wide advances through resource allocation, but also allows within-industry productivity advances through reallocation of resources across firms. This shift has clear welfare-enhancing impacts; see Bernard et al. (2007) for a general overview of this literature.

Vertical Specialization. Thus far, the discussion regarding sources of productivity growth in international trade has assumed that finished goods are being bought and sold across borders. The world of trade, though, has changed substantially. Today, multinational corporations (U.S. or foreignbased) are involved in 64 percent of U.S. goods trade (imports and exports), and fully 19 percent of U.S. goods exports are sales from a U.S. multinational firm to its affiliates abroad. An increase in international vertical specialization, where firms have production in multiple countries and break up the production of a particular good into stages across different countries, has contributed significantly to growth in world trade. The process can be within a large firm or intermediate inputs can be bought and sold on the market. Decreased trade costs have made it easier to break up the value chain of production as various parts of production can be done in different places and an in-process good can be shipped many times before final assembly. One study estimates that roughly one-third of the growth in world trade from 1970 to 1990 was attributable to the growth in vertical-specialization exports (Hummels, Ishii, and Yi 2001). Calculations about the extent of vertical specialization vary from estimates that 30 percent of OECD exports contain imported inputs to estimates that intermediate inputs account for up to 60 percent of world trade.4

A trade system in which the same firms are both importers and exporters complicates considerations of the impacts of trade on different groups, as comparative advantage may not matter as much for a particular good as for a particular task or piece of the production process. Specialization by process should allow the United States to focus on jobs oriented toward the processes that match the human capital, physical capital, and technology in the United States, again increasing productivity. But it has also raised fears that the process of adjustment could be disruptive, as a broader range of jobs could be exposed to international competition. The crucial policy goal is to harness the benefits of trade and ensure that its benefits are shared broadly by all Americans.

<sup>&</sup>lt;sup>4</sup> The 30 percent figure refers specifically to the share of exports that is made from imported inputs—sometimes called the vertical specialization of exports. The larger figure includes the volume of trade that is imports of intermediate goods used in the production of goods for either exports or the home market.

#### Encouraging Trade and Enforcing Trade Agreements

All of these aspects of trade highlight its potential to contribute to the long-run expansion of productivity in the United States. Many of the advantages of increased trade come from opening foreign markets to the products of U.S. workers. The best way to guarantee reliable access is through negotiated trade agreements and consistent enforcement of existing trade rules. As noted in Chapter 3, one positive development in the recent crisis is that, for the most part, countries did not resort to protectionism; that is, they did not close their markets to imports. Had they done so, the dislocation in U.S. employment would likely have been much worse. As it was, U.S. imports of goods and services fell 34 percent and exports dropped 26 percent from July 2008 to April 2009. From their peak in the third quarter of 2008 until the trough in the second quarter of 2009, the nominal value of exports of goods and services fell more than \$400 billion at an annual rate, a drop of almost 3 percent of GDP. Imports also dropped substantially. In the long run, such a decline in world trade would be harmful for the U.S. economy. If trade had stayed at that depressed level, with lower trade surpluses in the United States' main export goods and smaller trade deficits in our import goods, the long-run dislocations from the crisis would have been worse than now expected. But U.S. exports are rebounding, opening the possibility that many workers who lost jobs in the crisis may find employment in the same productive industries where they were before the crisis.

Several explanations have been offered for this avoidance of protectionism during the crisis. One is the availability of macroeconomic policy tools such as fiscal and monetary policy (Eichengreen and Irwin 2009); another is the public commitments made by leaders at the Group of Twenty summits to avoid protectionist strategies. But the clear and concrete rules-based trade system was helpful as well. That rules-based system, embodied by the World Trade Organization (WTO) and by other trade commitments, allows the United States to take steps to ensure that other countries will abide by their obligations. It is also designed to give U.S. workers and firms confidence about the economic environment they will be facing and confidence that commitments made when trade agreements are negotiated will be kept. In addition, creating predictable and enforceable markets for innovative and creative works grounded in intellectual property rights is essential to spurring and protecting U.S. investments in technology and innovation.

The Administration recognizes that simply negotiating trade frameworks is not enough; robust enforcement of trade rules is an important part of our engagement in the world economy. The Administration has taken many trade enforcement actions recently. For example, the Administration has continued pressing a WTO case that challenged China's treatment of U.S. auto parts exports. The ruling in this case resulted in China having to change its policies and increase its openness to U.S. exports. The United States (joined by Mexico and the European Union) has also initiated an action challenging China's use of subsidies and taxes to keep input costs low for firms in China, which lowers the cost of final goods from China relative to the world. Further, the Administration takes very seriously the "Special 301" process under which it monitors the protection and enforcement of intellectual property rights. In 2009, it added Canada to the priority watch list because Canada has not implemented key proposals to improve enforcement and protection of intellectual property rights. Actions like these represent the Administration's intent (made explicit, for example, in United States Trade Representative Ronald Kirk's speeches<sup>5</sup>) to enforce trade rules and aggressively pursue actions to open markets to U.S. exports.

As noted in Chapter 4, the Administration is currently pursuing these and other options to expand American exports, recognizing that increasing exports will be a key part of the U.S. growth model. Increases in our exports in the short run can help to return the economy to full employment. Over the longer run, increases in trade provide avenues for the United States to increase productivity through specialization, scale, and firm effects, and in turn, increase standards of living for American families.

Currently, a number of other trade expansion opportunities exist for the United States. The Administration supports a strong market-opening agreement for both goods and services in the WTO Doha Round negotiations and is continuing to work with U.S. trade partners on potential free trade agreements. Because the United States is a relatively open economy, negotiated trade deals often involve substantial improvements in access for U.S. exports to other countries relative to the market opening made by the United States.

It is also important that these trade frameworks protect productivityenhancing innovation through adequate provisions for intellectual property rights and that they reflect our values regarding workers and the environment. An example of the Administration's actions to improve the world's trading regime is seen in the way the Administration is working to engage our trading partners across the Pacific region in a new regional agreement (the Trans-Pacific Partnership). It will be a high-standards agreement that expands trade in a way that is beneficial to the economy, workers, small businesses, and farmers, and is consistent with the values of the United States.

In addition to benefits to the United States, trade benefits our trade partners. This is of direct benefit to Americans in the sense that as these

<sup>&</sup>lt;sup>5</sup> See for example his speech at Mon Valley Works—Edgar Thomson Plant on July 16, 2009.

economies grow, they can grow as a destination for U.S. exports. Trade can also have large benefits for the poorest countries. In particular, multilateral agreements that open trade flows between developing countries can have substantial impacts on poorer countries, and trade relations with the United States can be a crucial part of the path to development for the poorest countries. For example, the African Growth and Opportunity Act seeks to increase two-way trade with poor nations in sub-Saharan Africa, help integrate these countries into the global economy, and do so in a way that improves their institutions and reduces poverty. As development in the poorest nations of the world is in our national interest strategically, economically, and morally, trade presents win-win opportunities to advance development.

## Ensuring the Gains from Productivity Growth Are Widely Shared

Any productivity advance—be it from technological change, trade, or other factors—will have different impacts across the economy. As discussed earlier, productivity advances are crucial to an increase in living standards. Still, those firms that do not make a specific advance will likely contract or fail, and some workers in the affected industry may face losses. Likewise, international trade can have disparate effects across industries, firms, and workers. In both cases, society on average will be better off because the economy is able to generate a higher standard of living. But the recent stagnation in median real wages despite positive productivity growth (discussed in Chapter 8) highlights the challenge of ensuring that the gains from productivity growth are widely spread.

The potential for productivity advances to generate disparities in outcomes suggests the need for strong social policy to support those who do not immediately benefit and to ensure that gains from trade and productivity advances are shared by all. Because identifying directly impacted individuals is difficult, the logical response to productivity advances is a strong social safety net that ensures that all benefit from the rise in living standards. Trade theory suggests that trade liberalization can generate gains that are large enough that they can be shared in a way that every member of society is made better off. In the past, however, the gains from our trade policies have not been shared sufficiently, and technological change and globalization have left many behind.

Trade adjustment assistance, worker retraining, and temporary relief programs are ways the Federal Government can and does support those

who do not benefit from these advances. The Administration has supported trade adjustment assistance, which provides additional unemployment funds, retraining, and health coverage assistance, and has made trade adjustment assistance available to a wider set of employees through the Trade and Globalization Adjustment Assistance Act of 2009.

These specific institutions, though, are not enough. More broad-based policy must ensure that as the economy grows in the long run, it enhances living standards for all citizens. Progressive taxation—which can be justified in many ways—is supported by the uneven outcomes from productivity advances and globalization. Those whose incomes rise can pay a larger share of total taxes and still be better off than before the gains. By doing so, they support lower taxes for others whose incomes may have declined. This process makes everyone better off and thus supports innovation and open borders by minimizing the number of people who feel threatened by productivity advances and therefore oppose them.

For example, the ability to sell books across borders certainly enhanced the income J.K. Rowling was able to collect from writing the famous Harry Potter books. Had she been able to sell her books only in the United Kingdom, her audience and income would have been much smaller. In addition, millions of American readers benefited from the increased consumer choice and the ability to purchase her books. Similarly, more Americans can work as well-paid aircraft engineers or manufacturing employees for Boeing or as technology specialists for Apple because those firms are able to sell on a world market. At the same time, it is distinctly possible that some American authors who would have captured a larger share of the "magic-oriented book" market had there been no trade in literature were crowded out by Rowling's success, or that some handheld music device engineer in the United Kingdom has had to find another career because of Apple's success.

A progressive tax rate combined with trade allows those who realize substantial income gains from globalization to still prosper a great deal relative to the state where there is no trade and incomes are taxed at a flat rate. And it does so while making sure that those who face lower incomes from globalization also obtain benefits-not just through the lower prices and expanded choices associated with trade, but also through lower taxation.

Beyond a progressive tax rate, a strong social safety net can cushion the disruption generated by a dynamic economy. Unemployment insurance can provide temporary income. A robust health care system can ensure that temporary dislocations do not generate drastic consequences. And a vibrant education system can prepare workers for changing economic needs.

#### Conclusion

Advances in productivity are crucial to increasing the living standards of all Americans—to building a better future. Innovation initiatives, such as increased research and development, targeted investments, stronger intellectual property rights, and harnessing trade's productivity-enhancing potential, are all essential parts of lifting living standards in the long run. But to ensure living standards are rising for all, a dynamic open economy depends on a robust social infrastructure. Education improvements described in Chapter 8 are crucial to creating a well-trained labor force able to thrive in a flexible economy where innovation and trade may reshape industries over time. A sound health care system is needed to provide the certainty that changing jobs will not mean a loss of health services. And a productive, well-regulated financial system is essential to allocate capital to growing sectors. Thus, the initiatives being taken today as part of the Administration's rescue-and-rebuild programs are not meant only to correct the problems of today, but to set the stage for strong growth over decades to come.



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#### CHAPTER 10

# Fostering Productivity Growth Through Innovation and Trade

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#### A P P E N D I X A

# REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE COUNCIL OF ECONOMIC ADVISERS DURING 2009

#### LETTER OF TRANSMITTAL

COUNCIL OF ECONOMIC ADVISERS Washington, D.C., December 31, 2009

#### Mr. President:

The Council of Economic Advisers submits this report on its activities during calendar year 2009 in accordance with the requirements of the Congress, as set forth in section 10(d) of the Employment Act of 1946 as amended by the Full Employment and Balanced Growth Act of 1978.

Sincerely,

Christina D. Romer, *Chair* Austan Goolsbee, *Member* Cecilia Elena Rouse, *Member* 

# COUNCIL MEMBERS AND THEIR DATES OF SERVICE

Name	Position	Oath of office date	Separation date
Edwin G. Nourse	Chairman	August 9, 1946	November 1, 1949
Leon H. Keyserling	Vice Chairman	August 9, 1946	
	Acting Chairman	November 2, 1949	
	Chairman	May 10, 1950	January 20, 1953
John D. Clark	Member	August 9, 1946	
	Vice Chairman	May 10, 1950	February 11, 1953
Roy Blough	Member	June 29, 1950	August 20, 1952
Robert C. Turner	Member	September 8, 1952	January 20, 1953
Arthur F. Burns	Chairman	March 19, 1953	December 1, 1956
Neil H. Jacoby	Member	September 15, 1953	February 9, 1955
Walter W. Stewart	Member	December 2, 1953	April 29, 1955
Raymond J. Saulnier	Member	April 4, 1955	
	Chairman	December 3, 1956	January 20, 1961
Joseph S. Davis	Member	May 2, 1955	October 31, 1958
Paul W. McCracken	Member	December 3, 1956	January 31, 1959
Karl Brandt	Member	November 1, 1958	January 20, 1961
Henry C. Wallich	Member	May 7, 1959	January 20, 1961
Walter W. Heller	Chairman	January 29, 1961	November 15, 1964
James Tobin	Member	January 29, 1961	July 31, 1962
Kermit Gordon	Member	January 29, 1961	December 27, 1962
Gardner Ackley	Member	August 3, 1962	
,	Chairman	November 16, 1964	February 15, 1968
John P. Lewis	Member	May 17, 1963	August 31, 1964
Otto Eckstein	Member	September 2, 1964	February 1, 1966
Arthur M. Okun	Member	November 16, 1964	,
	Chairman	February 15, 1968	January 20, 1969
James S. Duesenberry	Member	February 2, 1966	June 30, 1968
Merton J. Peck	Member	February 15, 1968	January 20, 1969
Warren L. Smith	Member	July 1, 1968	January 20, 1969
Paul W. McCracken	Chairman	February 4, 1969	December 31, 1971
Hendrik S. Houthakker	Member	February 4, 1969	July 15, 1971
Herbert Stein	Member	February 4, 1969	
	Chairman	January 1, 1972	August 31, 1974
Ezra Solomon	Member	September 9, 1971	March 26, 1973
Marina v.N. Whitman	Member	March 13, 1972	August 15, 1973
Gary L. Seevers	Member	July 23, 1973	April 15, 1975
William J. Fellner	Member	October 31, 1973	February 25, 1975
Alan Greenspan	Chairman	September 4, 1974	January 20, 1977
Paul W. MacAvoy	Member	June 13, 1975	November 15, 1976
Burton G. Malkiel	Member	July 22, 1975	January 20, 1977
Charles L. Schultze	Chairman	January 22, 1977	January 20, 1981
William D. Nordhaus	Member	March 18, 1977	February 4, 1979
Lyle E. Gramley	Member	March 18, 1977	May 27, 1980

# COUNCIL MEMBERS AND THEIR DATES OF SERVICE

Name	Position	Oath of office date	Separation date
George C. Eads	Member	June 6, 1979	January 20, 1981
Stephen M. Goldfeld	Member	August 20, 1980	January 20, 1981
Murray L. Weidenbaum	Chairman	February 27, 1981	August 25, 1982
William A. Niskanen	Member	June 12, 1981	March 30, 1985
Jerry L. Jordan	Member	July 14, 1981	July 31, 1982
Martin Feldstein	Chairman	October 14, 1982	July 10, 1984
William Poole	Member	December 10, 1982	January 20, 1985
Beryl W. Sprinkel	Chairman	April 18, 1985	January 20, 1989
Thomas Gale Moore	Member	July 1, 1985	May 1, 1989
Michael L. Mussa	Member	August 18, 1986	September 19, 1988
Michael J. Boskin	Chairman	February 2, 1989	January 12, 1993
John B. Taylor	Member	June 9, 1989	August 2, 1991
Richard L. Schmalensee	Member	October 3, 1989	June 21, 1991
David F. Bradford	Member	November 13, 1991	January 20, 1993
Paul Wonnacott	Member	November 13, 1991	January 20, 1993
Laura D'Andrea Tyson	Chair	February 5, 1993	April 22, 1995
Alan S. Blinder	Member	July 27, 1993	June 26, 1994
Joseph E. Stiglitz	Member	July 27, 1993	
	Chairman	June 28, 1995	February 10, 1997
Martin N. Baily	Member	June 30, 1995	August 30, 1996
Alicia H. Munnell	Member	January 29, 1996	August 1, 1997
Janet L. Yellen	Chair	February 18, 1997	August 3, 1999
Jeffrey A. Frankel	Member	April 23, 1997	March 2, 1999
Rebecca M. Blank	Member	October 22, 1998	July 9, 1999
Martin N. Baily	Chairman	August 12, 1999	January 19, 2001
Robert Z. Lawrence	Member	August 12, 1999	January 12, 2001
Kathryn L. Shaw	Member	May 31, 2000	January 19, 2001
R. Glenn Hubbard	Chairman	May 11, 2001	February 28, 2003
Mark B. McClellan	Member	July 25, 2001	November 13, 2002
Randall S. Kroszner	Member	November 30, 2001	July 1, 2003
N. Gregory Mankiw	Chairman	May 29, 2003	February 18, 2005
Kristin J. Forbes	Member	November 21, 2003	June 3, 2005
Harvey S. Rosen	Member	November 21, 2003	
	Chairman	February 23, 2005	June 10, 2005
Ben S. Bernanke	Chairman	June 21, 2005	January 31, 2006
Katherine Baicker	Member	November 18, 2005	July 11, 2007
Matthew J. Slaughter	Member	November 18, 2005	March 1, 2007
Edward P. Lazear	Chairman	February 27, 2006	January 20, 2009
Donald B. Marron	Member	July 17, 2008	January 20, 2009
Christina D. Romer	Chair	January 29, 2009	
Austan Goolsbee	Member	March 11, 2009	
Cecilia E. Rouse	Member	March 11, 2009	

# REPORT TO THE PRESIDENT ON THE ACTIVITIES OF THE Council of Economic Advisers DURING 2009

The Council of Economic Advisers was established by the Employment Act of 1946 to provide the President with objective economic analysis and advice on the development and implementation of a wide range of domestic and international economic policy issues.

#### THE CHAIR OF THE COUNCIL

Christina D. Romer was nominated as Chair of the Council by the President on January 20, 2009. She was confirmed by the Senate on January 28, and took the oath of office on January 29. Dr. Romer is on a leave of absence from the University of California, Berkeley, where she is the Class of 1957-Garff B. Wilson Professor of Economics.

The Chair is a member of the President's Cabinet and is responsible for communicating the Council's views on economic matters directly to the President through personal discussions and written reports. Dr. Romer represents the Council at the daily Presidential economics briefing, daily White House senior staff meetings, budget meetings, Cabinet meetings, a variety of inter-agency meetings, and other formal and informal meetings with the President, the Vice President, and other senior government officials. She also meets frequently with members of Congress in both formal hearings and informal meetings to discuss economic issues and Administration priorities. She travels within the United States and overseas to present the Administration's views on the economy. Dr. Romer is the Council's chief public spokesperson. She directs the work of the Council and exercises ultimate responsibility for the work of the professional staff.

Dr. Romer succeeded Edward P. Lazear, whose tenure ended with the inauguration of the new President. Dr. Lazear returned to Stanford University, where he is the Jack Steele Parker Professor of Human Resources Management and Economics in the Graduate School of Business and the Morris Arnold Cox Senior Fellow at the Hoover Institution.

#### THE MEMBERS OF THE COUNCIL

The other Members of the Council are Austan Goolsbee and Cecilia Rouse. They were nominated by the President on January 20, 2009, confirmed by the Senate on March 10, and took their oaths of office on March 11. Dr. Goolsbee also serves as the Staff Director and Chief Economist of the President's Economic Recovery Advisory Board. Dr. Goolsbee is on a leave of absence from the University of Chicago, where he is the Robert P. Gwinn Professor of Economics in the Booth School of Business. Dr. Rouse is on a leave of absence from Princeton University, where she is the Theodore A. Wells '29 Professor of Economics and Public Affairs. The Members represent the Council at a wide variety of meetings and frequently attend meetings with the President and the Vice President.

The Chair and the Members work as a team on most economic policy issues. The Chair works on the whole range of issues under the Council's purview, with a particular focus on macroeconomics and health care. Dr. Goolsbee focuses especially on issues related to housing, financial markets, and tax policy. Dr. Rouse focuses especially on issues related to labor markets, education, and international trade.

The term of Donald B. Marron as a Member of the Council ended with the inauguration of the new President. He is currently president of Marron Economics, LLC.

#### AREAS OF ACTIVITY

#### Macroeconomic Policies

A central function of the Council is to advise the President on all major macroeconomic issues and developments. The Council is actively involved in all aspects of macroeconomic policy. In 2009, the central macroeconomic issues included monitoring the financial and economic crisis; formulating the policy response, including the American Recovery and Reinvestment Act of 2009, the Financial Stability Plan, and additional measures targeted to spur job creation and deal with problems in specific sectors; evaluating the effects of the policies and the economy's response; health insurance reform; and setting priorities for the budget. In this process, the Council works closely with the Department of the Treasury, the Office of Management and Budget, the National Economic Council, White House senior staff, and other agencies and officials.

The Council prepares for the President, the Vice President, and the White House senior staff a daily economic briefing memo analyzing current economic developments, and almost-daily memos on key economic data releases. The Chair also makes more in-depth presentations on the state of the economy to these officials and to the Cabinet.

The Council, the Department of Treasury, and the Office of Management and Budget-the Administration's economic "troika"are responsible for producing the economic forecasts that underlie the Administration's budget proposals. The Council initiates the forecasting process twice each year, consulting with a wide variety of outside sources, including leading private sector forecasters and other government agencies.

The Council issued a series of reports in 2009. Among those most directly related to macroeconomic policy were a report issued in May on estimation methodology for the jobs impact of specific programs of the Recovery Act; a report in June on the economic effects of comprehensive health insurance reform; a report in September on the macroeconomic effects of the Recovery Act; and three shorter reports accompanying that report focusing on the effects of state fiscal relief, the effects of the "Cash for Clunkers" program, and the cross-country experience with fiscal policy in the crisis.

The Council continued its efforts to improve the public's understanding of economic developments and of the Administration's economic policies through briefings with the economic and financial press, discussions with outside economists, and presentations to outside organizations. The Chair and Members also regularly met to exchange views on the macroeconomy with the Chairman and Members of the Board of Governors of the Federal Reserve System.

#### Microeconomic Policies

Throughout the year, the Council was an active participant in the analysis and consideration of a broad range of microeconomic policy issues. The Council was actively engaged in policy discussions on health insurance reform, financial regulatory reform, clean energy, the environment, education, and numerous labor market issues. As with macroeconomic policy, the Council works closely with other economic agencies, White House senior staff, and other agencies on these issues. Among the specific microeconomic issues that received particular attention in 2009 were small business lending; foreclosure mitigation and prevention; unemployment insurance; the condition and prospects of the American automobile industry; the role of cost-benefit analysis in regulatory policy; estimating the social benefits of reduced carbon emissions; reform of K-12 education; student financial aid; community colleges; potential developments in the U.S. labor market over the next five to ten years; and key indicators of family well-being in the recession and accompanying policy responses.

Many of the reports issued by the Council in 2009 were primarily concerned with microeconomic issues. In addition to its major health care report in June, the Council issued three other reports on health insurance reform over the course of the year—one on its impact on small businesses and their employees in July, one on its impact on state and local governments in September, and an update of the June report in December. The Council also issued an extensive report on the "jobs of tomorrow" in July and a report on simplifying student aid in September.

#### International Economic Policies

The Council was involved in a range of international trade and finance issues, with a particular emphasis on the consequences of the international financial crisis and the related global economic slowdown. The Council was an active participant in discussions at global and bilateral levels. Council Members and staff regularly met with economists, policy officials, and government officials of other countries to discuss issues relating to the global economy and participated in the first Strategic and Economic Dialogue with China in July 2009.

The Council was particularly active in examining policies that could help speed the global economy out of the current crisis. It carefully tracked developments in the global economy and considered the potential mediumrun impacts of the current crisis. It was also an active participant in the Presidential Study Directive examining the development policies of the United States Government, providing analysis and support to the effort to review the interactions between the United States and countries in the developing world.

On the international trade front, the Council was an active participant in the trade policy process, occupying a position on the Trade Policy Staff Committee and the Trade Policy Review Group. The Council provided analysis and recommendations on a range of trade-related issues involving the enforcement of existing trade agreements, reviews of current U.S. trade policies, and consideration of future policies. The Council was also an active participant on the Trade Promotion Coordinating Committee, helping to examine the ways in which exports may support economic growth in the years to come. In the area of investment and security, the Council participated on the Committee on Foreign Investment in the United States (CFIUS), discussing individual cases before CFIUS.

The Council is a leading participant in the Organisation for Economic Co-operation and Development (OECD), an important forum for economic cooperation among high-income industrial economies. Dr. Romer is

chair of the OECD's Economic Policy Committee, and Council staff participate actively in working-party meetings on macroeconomic policy and coordination.

#### PUBLIC INFORMATION

The Council's annual Economic Report of the President is an important vehicle for presenting the Administration's domestic and international economic policies. It is available for purchase through the Government Printing Office, and is viewable on-line at www.gpoaccess.gov/eop.

The Council prepared numerous reports in 2009, and the Chair and Members gave numerous public speeches and testified to Congress. The reports, texts of speeches, and written statements accompanying testimony are available at the Council's website, www.whitehouse.gov/cea.

Finally, the Council publishes the monthly Economic Indicators, which is available on-line at www.gpoaccess.gov/indicators.

#### THE STAFF OF THE COUNCIL OF ECONOMIC ADVISERS

The staff of the Council consists of the senior staff, senior economists, staff economists, research assistants, analysts, and the administrative and support staff. The staff at the end of 2009 were:

## Senior Staff

Senior staff play key managerial and analytical roles at the Council. They direct operations, perform central Council functions, and represent the Council in meetings with other agencies and White House offices.

Nan M. Gibson	. Chief of Staff
Michael B. Greenstone	. Chief Economist
Steven N. Braun	. Director of Macroeconomic Forecasting
Adrienne Pilot	. Director of Statistical Office

#### Senior Economists

Senior economists are Ph.D. economists on leave from academic institutions, government agencies, or private research institutions. They participate actively in the policy process, represent the Council in interagency meetings, and have primary responsibility for the economic analysis and reports prepared by the Council. Each senior economist is typically a primary author of one of the chapters in this *Report*.

Christopher D. Carroll	Macroeconomics
Mark G. Duggan	Health
W. Adam Looney	Public Finance, Tax Policy
Andrew Metrick	Finance
Jesse M. Rothstein	Labor, Education, Welfare
Jay C. Shambaugh	International Macroeconomics and Trade
Ann Wolverton	Energy, Environment, Natural Resources

# Staff Economists

Staff economists are typically graduate students on leave from their Ph.D. training in economics. They conduct advanced statistical analysis, contribute to reports, and generally support the research and analysis mission of the Council.

Sharon E. Boyd	Health
Gabriel Chodorow-Reich	International Macroeconomics and Trade
Laura J. Feiveson	Macroeconomics, Finance
Joshua K. Goldman	Energy, Environment, Infrastructure
Sarena F. Goodman	Education, Labor, Public Finance
Joshua K. Hausman	Macroeconomics
Zachary D. Liscow	Public Finance, Labor, Environment
William G. Woolston	Health, Education

#### Research Assistants

Research assistants are typically college graduates with significant coursework in economics. They conduct statistical analysis and data collection, and generally support the research and analysis mission of the Council. Both staff economists and research assistants contribute to this *Report* and play a crucial role in ensuring the accuracy of all Council documents.

Peter N. Ganong	Labor, Public Finance, Environment
Clare M. Hove	Macroeconomics
Michael P. Shapiro	Health, International Economics

## Statistical Office

The Statistical Office gathers, administers, and produces statistical information for the Council. Duties include preparing the statistical appendix to the *Economic Report of the President* and the monthly publication *Economic Indicators*. The staff also creates background materials for economic analysis and verifies statistical content in Presidential memoranda. The Office serves as the Council's liaison to the statistical community.

Brian A. Amorosi	Program	Analy	yst
Dagmara A. Mocala	Program	Analy	yst

## Administrative Office

The Administrative Office provides general support for the Council's activities. This includes financial management, ethics, human resource management, travel, operations of facilities, security, information technology, and telecommunications management support.

Rosemary M. Rogers	. Administrative Officer
Archana A. Snyder	. Financial Officer
Doris T. Searles	. Information Management Specialist

# Office of the Chair

Julie B. Siegel	Special Assistant to the Chair
Lisa D. Branch	Executive Assistant to the Members and
	Assistant to the Chief Economist

## Staff Support

Sharon K. Thomas ...... Administrative Support Assistant

### Other Staff

Brenda Szittya and Martha Gottron provided editorial assistance in the preparation of the 2010 Economic Report of the President.

C. Bennett Blau and Gabrielle A. Elul served as staff assistants. Mr. Blau also served as editor of the Morning Economic Bulletin.

Student interns provide invaluable help with research projects, dayto-day operations, and fact-checking. Interns during the year were: Michael D. Arena; Jana Curry; Samantha G. Ellner; Brett B. Flagg; Karen R. Li; Devin K. Mattson; Allison L. Moore; Seth H. Werfel; Carl C. Wheeler; Kie C. Riedel; Rebecca A. Wilson; Yuelan L. Wu; and Allen Yang.

#### **DEPARTURES**

Jane E. Ihrig left her position as Chief Economist of the Council in January to return to the Federal Reserve Board. Pierce E. Scranton left his position as Chief of Staff in January. He was succeeded by Karen Anderson, who left the Council in November for maternity leave.

The senior economists who resigned during the year (with their institutions after leaving the Council in parentheses) were: Jean M. Abraham (University of Minnesota); Scott J. Adams (University of Wisconsin); Benjamin N. Dennis (Department of the Treasury); Erik W. Durbin (Sullivan and Cromwell, LLP); Wendy M. Edelberg (Financial Crisis Inquiry Commission); Elizabeth A. Kopits (Environmental Protection Agency); Michael S. Piwowar (Senate Banking Committee); William M. Powers (International Trade Commission); and Robert P. Rebelein (Vassar College).

The staff economists who resigned during 2009 were Kristopher J. Dawsey, Elizabeth Schultz, and Brian Waters. Those who served as research assistants at the Council and resigned during 2009 were Michael Love and Aditi P. Sen.

There were three retirements at the Council in 2009: Alice Williams, Sandy Daigle and Mary Jones. Ms. Williams devoted 39 years and Ms. Daigle 23 years to the Council. Their untiring commitment, dedication, and loyalty in serving the Council, the Chairs, and the people of the United States over the years was extraordinary and will be greatly missed. Ms. Jones's 23 years of dedication to the senior economists and Council Members was a testament to her commitment to the Council and was greatly appreciated.

# A P P E N D I X B

# STATISTICAL TABLES RELATING TO INCOME, EMPLOYMENT, AND PRODUCTION



# C O N T E N T S

NATIO	NAL INCOME OR EXPENDITURE	Page
B-1.	Gross domestic product, 1960–2009	328
B-2.	Real gross domestic product, 1960–2009	330
В-3.	Quantity and price indexes for gross domestic product, and percent changes, 1960–2009	332
B-4.	Percent changes in real gross domestic product, 1960–2009	333
B-5.	Contributions to percent change in real gross domestic product, 1960–2009 $\dots$	334
В-6.	Chain-type quantity indexes for gross domestic product, 1960–2009	336
B-7.	Chain-type price indexes for gross domestic product, 1960–2009	338
В-8.	Gross domestic product by major type of product, 1960–2009	340
В-9.	Real gross domestic product by major type of product, 1960–2009	341
B-10.	Gross value added by sector, 1960–2009	342
B-11.	Real gross value added by sector, 1960–2009	343
B-12.	Gross domestic product (GDP) by industry, value added, in current dollars and as a percentage of GDP, 1979–2008	344
B-13.	Real gross domestic product by industry, value added, and percent changes, 1979–2008	346
B-14.	Gross value added of nonfinancial corporate business, 1960–2009	348
B-15.	Gross value added and price, costs, and profits of nonfinancial corporate business, 1960–2009	349
B-16.	Personal consumption expenditures, 1960–2009	350
B-17.	Real personal consumption expenditures, 1995–2009	351
B-18.	Private fixed investment by type, 1960–2009	352
B-19.	Real private fixed investment by type, 1995–2009	353
B-20.	Government consumption expenditures and gross investment by type, 1960–2009	354
B-21.	Real government consumption expenditures and gross investment by type, 1995–2009	355
B-22.	Private inventories and domestic final sales by industry, 1960–2009	356
B-23.	Real private inventories and domestic final sales by industry, 1960–2009	357
B-24.	Foreign transactions in the national income and product accounts, 1960–2009	358

NATIO	NAL INCOME OR EXPENDITURE—Continued
B-25.	Real exports and imports of goods and services, 1995–2009
B-26.	Relation of gross domestic product, gross national product, net national product, and national income, 1960–2009
B-27.	Relation of national income and personal income, 1960–2009
B-28.	National income by type of income, 1960–2009
B-29.	Sources of personal income, 1960–2009
B-30.	Disposition of personal income, 1960–2009
B-31.	Total and per capita disposable personal income and personal consumption expenditures, and per capita gross domestic product, in current and real dollars, 1960–2009
B-32.	Gross saving and investment, 1960–2009
В-33.	Median money income (in 2008 dollars) and poverty status of families and people, by race, selected years, 1996–2008
POPUI	ATION, EMPLOYMENT, WAGES, AND PRODUCTIVITY
B-34.	Population by age group, 1933–2009
B-35.	Civilian population and labor force, 1929–2009
В-36.	Civilian employment and unemployment by sex and age, 1962–2009
B-37.	Civilian employment by demographic characteristic, 1962–2009
В-38.	Unemployment by demographic characteristic, 1962–2009
B-39.	Civilian labor force participation rate and employment/population ratio, 1962–2009
B-40.	Civilian labor force participation rate by demographic characteristic, 1968–2009
B-41.	Civilian employment/population ratio by demographic characteristic, 1968–2009
B-42.	Civilian unemployment rate, 1962–2009
B-43.	Civilian unemployment rate by demographic characteristic, 1968–2009
B-44.	Unemployment by duration and reason, 1962–2009
B-45.	Unemployment insurance programs, selected data, 1980–2009
B-46.	Employees on nonagricultural payrolls, by major industry, 1962–2009
B-47.	Hours and earnings in private nonagricultural industries, 1962–2009
B-48.	Employment cost index, private industry, 1995–2009
B-49.	Productivity and related data, business and nonfarm business sectors, 1960–2009
B-50.	Changes in productivity and related data, business and nonfarm business sectors, 1960–2009

# PRODUCTION AND BUSINESS ACTIVITY

B-51.	Industrial production indexes, major industry divisions, 1962–2009	390
B-52.	Industrial production indexes, market groupings, 1962–2009	391
В-53.	Industrial production indexes, selected manufacturing industries, 1967–2009	392
B-54.	Capacity utilization rates, 1962–2009	393
B-55.	New construction activity, 1964–2009	394
В-56.	New private housing units started, authorized, and completed and houses sold, 1962–2009	395
B-57.	Manufacturing and trade sales and inventories, 1968–2009	396
B-58.	Manufacturers' shipments and inventories, 1968–2009	397
B-59.	Manufacturers' new and unfilled orders, 1968–2009	398
PRICE	S	
В-60.	Consumer price indexes for major expenditure classes, 1965–2009	399
B-61.	Consumer price indexes for selected expenditure classes, 1965–2009	400
B-62.	Consumer price indexes for commodities, services, and special groups, 1965–2009	402
В-63.	Changes in special consumer price indexes, 1965–2009	403
В-64.	Changes in consumer price indexes for commodities and services, 1933–2009	404
В-65.	Producer price indexes by stage of processing, 1965–2009	405
В-66.	Producer price indexes by stage of processing, special groups, 1974–2009	407
В-67.	Producer price indexes for major commodity groups, 1965–2009	408
В-68.	Changes in producer price indexes for finished goods, 1969–2009	410
MONE	Y STOCK, CREDIT, AND FINANCE	
В-69.	Money stock and debt measures, 1970–2009	411
B-70.	Components of money stock measures, 1970–2009	412
B-71.	Aggregate reserves of depository institutions and the monetary base, 1979–2009	414
B-72.	Bank credit at all commercial banks, 1972–2009	415
B-73.	Bond yields and interest rates, 1929–2009	416
B-74.	Credit market borrowing, 2001–2009	418
B-75.	Mortgage debt outstanding by type of property and of financing, 1950–2009	420
В-76.	Mortgage debt outstanding by holder, 1950–2009	421
В-77.	Consumer credit outstanding, 1959–2009	422

# **GOVERNMENT FINANCE**

	B-78.	Federal receipts, outlays, surplus or deficit, and debt, fiscal years, 1943–2011
	B-79.	Federal receipts, outlays, surplus or deficit, and debt, as percent of gross domestic product, fiscal years 1937–2011
	В-80.	Federal receipts and outlays, by major category, and surplus or deficit, fiscal years 1943–2011
	B-81.	Federal receipts, outlays, surplus or deficit, and debt, fiscal years 2006–2011 $\dots$
	B-82.	Federal and State and local government current receipts and expenditures, national income and product accounts (NIPA), 1960–2009
	B-83.	Federal and State and local government current receipts and expenditures, national income and product accounts (NIPA), by major type, $1960-2009$
	B-84.	Federal Government current receipts and expenditures, national income and product accounts (NIPA), 1960–2009
	B-85.	State and local government current receipts and expenditures, national income and product accounts (NIPA), 1960–2009
	B-86.	State and local government revenues and expenditures, selected fiscal years, 1942–2007
	B-87.	U.S. Treasury securities outstanding by kind of obligation, 1970–2009
	В-88.	Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1970–2009
	B-89.	Estimated ownership of U.S. Treasury securities, 2000–2009
(	CORPC	PRATE PROFITS AND FINANCE
	В-90.	Corporate profits with inventory valuation and capital consumption adjustments, 1960–2009
	B-91.	Corporate profits by industry, 1960–2009
	B-92.	Corporate profits of manufacturing industries, 1960–2009
	В-93.	Sales, profits, and stockholders' equity, all manufacturing corporations, 1968–2009
	B-94.	Relation of profits after taxes to stockholders' equity and to sales, all manufacturing corporations, 1959–2009
	B-95.	Historical stock prices and yields, 1949–2003
	В-96.	Common stock prices and yields, 2000–2009
A	GRIC	ULTURE
	B-97.	Farm income, 1948–2009
	B-98.	Farm business balance sheet, 1952–2009
	B-99.	Farm output and productivity indexes, 1948–2008
	B-100.	Farm input use, selected inputs, 1948–2009

# AGRICULTURE—Continued

B-101. Agricultural price indexes and farm real estate value, 1975-2009	446
B-102. U.S. exports and imports of agricultural commodities, 1950-2009	447
INTERNATIONAL STATISTICS	
B-103. U.S. international transactions, 1946-2009	448
B-104. U.S. international trade in goods by principal end-use category, 1965-2009	9 450
B-105. U.S. international trade in goods by area, 2001-2009	451
B-106. U.S. international trade in goods on balance of payments (BOP) and Cens basis, and trade in services on BOP basis, 1981-2009	
B–107. International investment position of the United States at year-end, 2001–2008	453
B-108. Industrial production and consumer prices, major industrial countries,	454
B-109. Civilian unemployment rate, and hourly compensation, major industrial countries, 1982–2009	455
B-110. Foreign exchange rates, 1988-2009	456
B-111. International reserves, selected years, 1972-2009	457
R 112 Crowth rates in real gross domestic product 1991 2010	150

#### General Notes

Detail in these tables may not add to totals because of rounding.

Because of the formula used for calculating real gross domestic product (GDP), the chained (2005) dollar estimates for the detailed components do not add to the chained-dollar value of GDP or to any intermediate aggregate. The Department of Commerce (Bureau of Economic Analysis) no longer publishes chained-dollar estimates prior to 1995, except for selected series.

Unless otherwise noted, all dollar figures are in current dollars.

Symbols used:

<sup>p</sup> Preliminary.

... Not available (also, not applicable).

Data in these tables reflect revisions made by the source agencies through January 29, 2010. In particular, tables containing national income and product accounts (NIPA) estimates reflect revisions released by the Department of Commerce in July 2009.

# NATIONAL INCOME OR EXPENDITURE

# Table B-1. Gross domestic product, 1960-2009

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	Personal consumption expenditu				quartorry a			ate domestic			
	_						Fi	xed investme	nt		
Year or quarter	Gross domestic						N	Vonresidentia	al		Change in
	product	Total	Goods	Services	Total	Total	Total	Structures	Equip- ment and software	Resi- dential	private inven- tories
1960 1961 1962 1963 1964 1965 1966 1966 1969 1967 1970 1971 1977 1977 1978 1978 1979 1980 1981 1982 1983 1984 1985 1988 1989 1990 1991 1991 1992 1993 1993 1994 1995 1997 1998 1999 2000 2001 2002 2003 2006 2006 2008 2009 p	526 4 544.8 585.7 617.8 663.6 6719.1 787.7 832.4 998.4 1,038.3 1,126.8 1,126.7 1,1382.3 1,1499.5 1,1637.7 1,1824.6 1,2030.1 2,293.8 2,562.2 2,2788.1 3,126.8 3,3126.8	331.8 342.2 363.3 382.7 411.5 443.8 480.9 507.8 558.0 605.1 648.3 701.6 770.6 932.9 1,033.8 1,277.8 1,427.6 1,591.2 2,797.5 2,288.6 2,501.1 2,717.6 2,896.7 3,359.1 3,359.1 3,359.1 3,359.1 3,359.1 3,359.1 3,359.1 4,483.6 4,714.8 4,987.3 5,570.6 5,918.5 6,342.8 6,830.4 7,148.8 6,830.4 7,148.8 6,830.4 7,148.8 6,830.4 7,148.8 6,830.4 7,148.8 6,830.4 7,148.8 6,830.4 7,148.8 6,830.4 7,148.8 6,830.4 7,148.8 7,804.0 8,285.7 8,918.5 6,342.8 8,819.0 9,322.7 9,	177.0 178.8 189.0 198.2 2712.3 229.7 249.6 259.0 284.6 304.7 318.8 3421.8 491.3 546.5 491.3 546.6 451.5 491.3 1,497.4 899.3 973.8 1,063.7 7,799.8 869.4 4,500.4 1,195.6 1,256.3 1,337.3 1,497.4 1,563.3 1,497.4 1,497.	154.8 163.4 174.4 184.6 199.2 214.1 231.3 248.8 273.4 339.5 359.5 435.4 435.4 454.5 604.9 956.0 1,070.1 1,176.2 1,314.8 1,437.4 1,580.0 1,701.1 1,840.7 2,482.6 2,482.6 2,482.6 2,482.6 2,482.6 2,482.6 2,482.6 2,482.6 3,583.9 4,583.	78.9 78.9 78.9 78.9 88.1 93.8 102.1 118.2 131.3 128.6 141.2 156.4 152.4 178.2 207.6 244.5 249.4 230.2 292.0 361.3 438.0 492.9 479.3 572.4 673.6 274.6 874.9 861.0 802.9 861.0 802.9 861.0 874.9 861.0 874.9 1,735.0 871.6 874.9 1,735.0 871.6 874.9 1,735.0 871.6 874.9 1,735.0 871.6 874.9 1,735.0 871.6 874.9 1,735.0 871.6 874.9 1,735.0 1,	75.7 75.7 75.2 82.0 88.1 97.2 109.0 117.7 118.7 132.1 147.3 150.4 168.9 198.5 228.6 235.4 236.5 235.4 236.5 235.4 2474.9 448.6 532.1 570.1 670.2 714.4 739.9 803.1 847.3 847.3 847.3 847.3 847.3 847.3 1,112.9 1,22.9 1,23.	Total  49.4 48.8 53.1 56.0 63.0 74.8 85.4 86.4 93.4 104.7 109.0 114.1 128.8 153.3 169.5 173.7 192.4 228.7 280.6 333.9 362.4 420.0 420.5 427.2 489.6 526.2 519.8 607.7 622.4 598.2 607.7 622.4 598.2 607.7 622.4 598.2 607.7 1,125.4 1,135.7 1,125.4 1,135.7 1,223.0 1,347.3 1,505.3 1,367.3 1,505.3 1,367.3 1,505.3 1,367.3 1,505.3 1,367.3 1,505.3 1,693.6 1,386.6 1,386.6	Structures  19.6 19.7 20.8 21.2 23.7 28.3 31.3 31.5 33.6 33.6 33.6 40.3 42.7 47.2 55.0 61.2 61.4 65.9 74.6 93.6 117.7 136.2 167.3 177.6 174.2 182.8 193.7 202.9 183.6 177.2 182.8 193.7 202.9 183.6 177.2 182.8 193.7 202.9 183.6 177.2 182.8 193.7 202.9 183.6 177.2 186.8 193.7 202.9 183.6 177.2 186.8 193.7 202.9 183.6 177.2 186.8 193.7 202.9 183.6 177.2 186.8 193.7 202.9 183.6 177.2 186.8 193.7 202.9 183.6 177.2 186.8 193.7 202.9 183.6 175.1 283.9 275.1 283.9 361.7 360.7 360.8	ment and	dential  26.3 26.4 29.0 32.1 34.3 34.2 32.3 32.4 38.7 65.0 60.7 75.3 131.6 141.0 123.2 122.6 188.2 122.6 188.2 220.1 236.3 239.3 239.5 224.0 205.1 236.3 239.3 239.5 224.0 205.7 60.0 302.1 34.9 34.7 34.9 34.7 36.0 302.1 302.9 334.1 302.9 345.0 345	3.2 3.0 6.1 5.6 4.8 8 9.2 2 13.6 6.1 9.9 9.1 9.1 15.9 15.9 17.5 8 18.0 17.1 18.5 27.8 6.1 18.5 27.7 14.5 18.5 27.7 14.5 18.5 27.7 60.8 63.8 63.8 54.5 18.3 12.0 8 63.7 60.8 63.8 54.5 18.5 27.7 60.8 63.9 16.4 64.9 54.9 16.4 64.9 16.5 16.4 64.9 17.5 16.5 16.4 64.9 17.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16
2007: I	13,347.8 13,452.9 13,611.5 13,795.6 13,997.2 14,179.9 14,337.9	9,266.6 9,391.8 9,484.1 9,658.5 9,762.5 9,865.6 10,019.2	3,206.5 3,250.5 3,249.1 3,306.3 3,338.2 3,366.6 3,448.9	6,060.1 6,141.3 6,235.0 6,352.2 6,424.3 6,499.0 6,570.3	2,352.1 2,333.5 2,286.5 2,267.2 2,302.0 2,311.9 2,272.9	2,279.7 2,264.4 2,254.2 2,254.1 2,278.6 2,280.8 2,263.0	1,495.3 1,522.7 1,546.1 1,574.1 1,623.5 1,665.2 1,697.9	428.6 447.6 461.7 489.5 519.9 556.1 575.9	1,066.7 1,075.1 1,084.4 1,084.6 1,103.5 1,109.1 1,122.0	784.4 741.7 708.1 680.0 655.1 615.6 565.2	72.4 69.1 32.3 13.1 23.5 31.0 9.8
2008: IIIIV	14,373.9 14,497.8 14,546.7 14,347.3	10,095.1 10,194.7 10,220.1 10,009.8	3,447.2 3,474.9 3,463.0 3,227.5	6,647.9 6,719.8 6,757.1 6,782.3	2,214.8 2,164.6 2,142.7 2,022.1	2,223.0 2,214.0 2,179.7 2,066.6	1,705.0 1,719.7 1,711.0 1,638.7	586.3 610.6 620.4 620.7	1,118.7 1,109.2 1,090.6 1,018.0	518.1 494.2 468.6 427.8	-8.2 -49.3 -37.0 -44.5
2009: I II IV P	14,178.0 14,151.2 14,242.1 14,463.4	9,987.7 9,999.3 10,132.9 10,250.5	3,197.7 3,193.8 3,292.3 3,346.8	6,790.0 6,805.6 6,840.6 6,903.7	1,689.9 1,561.5 1,556.1 1,684.0	1,817.2 1,737.7 1,712.6 1,724.0	1,442.6 1,391.8 1,353.9 1,358.2	533.1 494.8 457.9 436.8	909.5 897.0 895.9 921.5	374.6 345.9 358.8 365.7	-127.4 -176.2 -156.5 -40.0

### Table B-1. Gross domestic product, 1960-2009—Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	N good	et exports Is and serv	of vices	Gov	ernment o	onsumptio gross inves	n expenditu tment	ıres	Final	Gross	Adden- dum:	from pr	change eceding riod
Year or quarter	Net	Exports	Imports	Total		Federal		State and	sales of domes- tic product	domes- tic pur- chases <sup>1</sup>	Gross national prod-	Gross domes-	Gross domes- tic
	exports	Exports	Imports	iotai	Total	National defense	Non- defense	local	product	Sildooo	uct <sup>2</sup>	tic product	pur- chases <sup>1</sup>
1960	4.2 4.9 4.1 4.9 5.6 3.9 3.6 1.4 4.1 -3.4 4.1 -2.5 -2.5 -13.1 -2.5 -13.1 -2.5 -13.1 -2.5	27.0 27.6 29.1 31.1 35.0 37.1 40.9 43.5 47.9 51.9 59.7 63.0 70.8 95.3 126.7 138.7 149.5 159.4 186.9 230.1 280.8 305.2	22.8 22.7 25.0 26.1 31.5 37.1 39.9 46.6 50.5 55.8 62.3 74.2 91.2 127.5 122.7 151.1 182.4 212.3 252.7	111.5 119.5 130.1 136.4 143.2 151.4 171.6 192.5 209.3 221.4 233.7 246.4 263.4 281.7 317.9 357.7 383.0 414.1 453.6 500.7 566.1 627.5	64.1 67.9 75.2 76.9 78.4 80.4 92.4 104.6 111.3 113.4 113.6 119.6 122.5 134.5 149.0 159.7 175.4 190.9 210.6 243.7 280.2	53.3 56.5 61.1 61.0 60.2 60.6 71.7 83.4 89.2 89.5 87.6 84.6 86.9 130.5 145.2 145.2 168.0	10.7 11.4 14.1 15.9 18.2 19.8 20.8 21.2 22.0 23.8 25.8 29.1 32.7 34.3 39.0 45.1 48.6 60.4 654.5 60.4 654.5	47.5 51.6 54.9 59.5 64.8 71.0 79.2 87.9 98.0 108.2 120.3 132.8 143.8 159.2 183.4 208.7 223.3 238.7 262.7 290.7 290.7	523.2 541.8 579.6 612.1 658.8 709.9 774.1 822.6 900.8 975.3 1.036.3 1.1228.8 1.366.4 1.485.5 2.007.8 2.268.0 2.544.2 2.794.5 3.097.0	522.2 539.8 581.6 612.8 656.7 713.5 828.9 908.5 983.0 1.034.4 1.126.2 1.500.3 1.621.7 1.826.2 2.053.2 2.319.1 2.584.2 3.139.4 2.801.2	529.6 548.3 589.7 622.2 668.6 724.4 792.8 837.8 915.9 990.5 1.044.7 1.246.4 1.394.9 1.515.0 1.650.7 1.841.4 2.315.3 2.594.2 2.822.3 3.159.8	3.9 3.5 7.5 5.5 5.7 8.4 9.5 5.7 9.3 8.2 5.5 9.9 11.7 8.5 9.2 11.4 11.3 13.0 11.7 8.8	3.4 7.7 5.4 7.2 8.6 9.9 5.8 9.6 8.9 10.2 11.0 8.9 8.1 12.6 12.4 13.0 11.5 8.4 12.1
1982	-20.0 -51.7 -102.7 -115.2 -132.5 -145.0 -110.1 -87.9	283.2 277.0 302.4 302.0 320.3 363.8 443.9 503.1	303.2 328.6 405.1 417.2 452.9 508.7 554.0 591.0	680.4 733.4 796.9 878.9 949.3 999.4 1,038.9 1,100.6	310.8 342.9 374.3 412.8 438.4 459.5 461.6 481.4	225.9 250.6 281.5 311.2 330.8 350.0 354.7 362.1	84.9 92.3 92.7 101.6 107.6 109.6 106.8 119.3	369.7 390.5 422.6 466.1 510.9 539.9 577.3 619.2	3,268.1 3,540.4 3,865.5 4,195.6 4,453.5 4,709.2 5,081.9 5,454.5	3,273.2 3,586.3 4,033.6 4,332.7 4,592.6 4,881.3 5,210.5 5,570.0	3,289.7 3,571.7 3,967.2 4,244.0 4,477.7 4,754.0 5,123.8 5,508.1	4.0 8.7 11.2 7.3 5.8 6.2 7.7 7.5	4.3 9.6 12.5 7.4 6.0 6.3 6.7 6.9
1990	-77.6 -27.0 -32.8 -64.4 -92.7 -90.7 -96.3 -101.4 -161.8 -262.1	552.1 596.6 635.0 655.6 720.7 811.9 867.7 954.4 953.9 989.3	629.7 623.5 667.8 720.0 813.4 902.6 964.0 1,055.8 1,115.7 1,251.4	1,181.7 1,236.1 1,273.5 1,294.8 1,329.8 1,374.0 1,421.0 1,474.4 1,526.1 1,631.3	507.5 526.6 532.9 525.0 518.6 518.8 527.0 531.0 531.0 554.9	373.9 383.1 376.8 363.0 353.8 348.8 354.8 349.8 346.1 361.1	133.6 143.4 156.1 162.0 164.8 170.0 172.2 181.1 184.9 193.8	674.2 709.5 740.6 769.8 811.2 855.3 894.0 943.5 995.0 1,076.3	5,786.0 5,992.5 6,326.0 6,646.5 7,021.4 7,383.5 7,807.7 8,261.4 8,729.8 9,292.7	5,878.1 6,019.1 6,375.1 6,731.7 7,177.9 7,505.3 7,934.8 8,433.7 8,955.3 9,615.6	5,835.0 6,022.0 6,371.4 6,698.5 7,109.2 7,444.3 7,870.1 8,355.8 8,810.8 9,381.3	5.8 3.3 5.8 5.1 6.3 4.7 5.7 6.3 5.5 6.4	5.5 2.4 5.9 5.6 6.6 4.6 5.7 6.3 6.2 7.4
2000 2001 2001 2002 2003 2004 2005 2006 2007 2008 2008	-382.1 -371.0 -427.2 -504.1 -618.7 -722.7 -769.3 -713.8 -707.8 -390.1	1,093.2 1,027.7 1,003.0 1,041.0 1,180.2 1,305.1 1,471.0 1,655.9 1,831.1 1,560.0	1,475.3 1,398.7 1,430.2 1,545.1 1,798.9 2,027.8 2,240.3 2,369.7 2,538.9 1,950.1	1,731.0 1,846.4 1,983.3 2,112.6 2,232.8 2,369.9 2,518.4 2,676.5 2,883.2 2,933.3	576.1 611.7 680.6 756.5 824.6 876.3 931.7 976.7 1,082.6 1,144.9	371.0 393.0 437.7 497.9 550.8 589.0 624.9 662.1 737.9 779.1	205.0 218.7 242.9 258.5 273.9 287.3 306.8 314.5 344.7 365.8	1,154.9 1,234.7 1,302.7 1,356.1 1,408.2 1,493.6 1,586.7 1,699.8 1,800.6 1,788.4	9,896.9 10,324.5 10,630.3 11,125.8 11,802.8 12,588.4 13,339.0 14,058.3 14,476.2 14,383.7	10,333.5 10,657.2 11,069.5 11,646.3 12,486.4 13,361.1 14,168.2 14,791.4 15,149.2 14,648.8	9,989.2 10,338.1 10,691.4 11,210.8 11,959.0 12,735.5 13,471.3 14,193.3 14,583.3	6.4 3.4 3.5 4.7 6.5 6.5 6.0 5.1 2.6 -1.3	7.5 3.1 3.9 5.2 7.2 7.0 6.0 4.4 2.4 -3.3
2006: I II IV	-775.8 -781.4 -805.7 -714.3	1,414.0 1,456.0 1,476.0 1,538.2	2,189.8 2,237.4 2,281.7 2,252.5	2,474.5 2,510.5 2,533.3 2,555.2	928.5 930.3 932.2 935.9 942.8	615.5 624.1 623.3 636.6	313.0 306.2 308.9 299.3	1,546.1 1,580.2 1,601.2 1,619.4	13,117.5 13,275.4 13,383.8 13,579.2	13,959.3 14,129.2 14,258.6 14,325.8	13,264.0 13,423.3 13,514.8 13,683.2	8.6 5.1 3.2 4.8	7.6 5.0 3.7 1.9
2007:            	-729.4 -724.8 -698.4 -702.5	1,564.9 1,602.1 1,685.2 1,771.6	2,294.3 2,326.9 2,383.6 2,474.0	2,599.3 2,657.4 2,700.9 2,748.3	968.1 991.4 1,004.3	636.7 656.6 674.4 680.8	306.1 311.6 317.0 323.6	1,656.5 1,689.3 1,709.5 1,743.9	13,782.5 13,973.7 14,148.8 14,328.0	14,525.0 14,722.0 14,878.3 15,040.3	13,859.5 14,073.3 14,318.3 14,522.2	5.5 6.0 5.3 4.5	5.7 5.5 4.3 4.4
2008:            	-744.4 -738.7 -757.5 -590.5	1,803.6 1,901.5 1,913.1 1,706.2	2,548.1 2,640.2 2,670.5 2,296.7	2,808.4 2,877.1 2,941.4 2,905.9	1,038.3 1,069.5 1,108.3 1,114.3	703.6 725.6 763.6 758.9	334.8 343.9 344.7 355.3	1,770.1 1,807.6 1,833.1 1,791.7	14,382.1 14,547.1 14,583.7 14,391.8	15,118.3 15,236.4 15,304.2 14,937.8	14,544.9 14,626.6 14,707.5 14,454.3	1.0 3.5 1.4 -5.4	2.1 3.2 1.8 -9.2
2009:                  V    p	-378.5 -339.1 -402.2 -440.5	1,509.3 1,493.7 1,573.8 1,663.4	1,887.9 1,832.8 1,976.0 2,103.9	2,879.0 2,929.4 2,955.4 2,969.5	1,106.7 1,138.3 1,164.3 1,170.4	750.7 776.2 795.8 793.8	356.0 362.1 368.5 376.5	1,772.3 1,791.2 1,791.1 1,799.1	14,305.3 14,327.4 14,398.7 14,503.4	14,556.5 14,490.3 14,644.3 14,903.9	14,277.9 14,243.8 14,363.7	-4.6 8 2.6 6.4	-9.8 -1.8 4.3 7.3

 $<sup>^1</sup>$  Gross domestic product (GDP) less exports of goods and services plus imports of goods and services.  $^2$  GDP plus net income receipts from rest of the world.

### Table B-2. Real gross domestic product, 1960-2009

[Billions of chained (2005) dollars, except as noted; quarterly data at seasonally adjusted annual rates]

		Personal co	nsumption e	xpenditures			Gross priva	ate domestic	investment		
							Fi	xed investme	ent		
Year or quarter	Gross domestic						1	Nonresidentia	al		Change in
	product	Total	Goods	Services	Total	Total	Total	Structures	Equip- ment and software	Resi- dential	private inven- tories
1960	2,830.9	1,784.4			296.5						
1961 1962	2,896.9 3,072.4	1,821.2 1,911.2			294.6 332.0						
1962 1963	3,206.7	1,989.9			354.3						
1964	3,392.3	2,108.4			383.5						
1965	3,610.1	2,241.8			437.3						
1966 1967	3,845.3 3,942.5	2,369.0 2.440.0			475.8 454.1						
1968	4,133.4	2,580.7			480.5						
1969	4,261.8	2,677.4			508.5						
1970	4,269.9	2,740.2			475.1						
1971	4,413.3	2,844.6			529.3 591.9						
1972 1973	4,647.7 4.917.0	3,019.5 3,169.1			661.3						
1974	4,889.9	3,142.8			612.6						
1975	4,879.5	3,214.1			504.1						
1976 1977	5,141.3 5,377.7	3,393.1 3,535.9			605.9 697.4						
1978	5,677.6	3,691.8			781.5						
1979	5,855.0	3,779.5			806.4						
1980	5,839.0	3,766.2			717.9						
1981	5,987.2	3,823.3			782.4						
1982 1983	5,870.9 6,136.2	3,876.7 4,098.3			672.8 735.5						
1984	6,577.1	4,315.6			952.1						
1985	6,849.3	4,540.4			943.3						
1986	7,086.5	4,724.5			936.9						
1987 1988	7,313.3 7,613.9	4,870.3 5,066.6			965.7 988.5						
1989	7,885.9	5,209.9			1,028.1						
1990	8,033.9	5,316.2			993.5						
1991	8,015.1	5,324.2			912.7						
1992	8,287.1	5,505.7			986.7						
1993 1994	8,523.4 8,870.7	5,701.2 5.918.9			1,074.8 1.220.9						
1995	9,093.7	6,079.0	1,898.6	4,208.2	1,258.9	1,235.7	792.2	342.0	493.0	456.1	32.1
1996	9,433.9	6,291.2	1,983.6	4,331.4	1,370.3	1,346.5	866.2	361.4	545.4	492.5	31.2
1997 1998	9,854.3 10,283.5	6,523.4 6,865.5	2,078.2 2,218.6	4,465.0 4,661.8	1,540.8 1,695.1	1,470.8 1,630.4	970.8 1,087.4	387.9 407.7	620.4 710.4	501.8 540.4	77.4
1999	10,203.3	7,240.9	2,395.3	4,852.8	1,844.3	1,782.1	1,200.9	407.7	810.9	574.2	71.6 68.5
2000	11,226.0	7,608.1	2,521.7	5,093.3	1,970.3	1,913.8	1,318.5	440.0	895.8	580.0	
2001	11,347.2	7,813.9	2,600.9	5,218.7	1,831.9	1,877.6	1,281.8	433.3	866.9	583.3	60.2 -41.8
2002	11,553.0	8,021.9	2,706.6	5,318.1	1,807.0	1,798.1	1,180.2	356.6	830.3	613.8	12.8 17.3 66.3
2003 2004	11,840.7 12,263.8	8,247.6 8.532.7	2,829.9 2.955.3	5,418.4 5,577.6	1,871.6 2,058.2	1,856.2 1,992.5	1,191.0 1,263.0	343.0 346.7	851.4 917.3	664.3 729.5	17.3 66.3
2005	12 638 4	8,819.0	3,073.9	5,745.1	2.172.2	2.122.3	1,347.3	351.8	995.6	775.0	1 50.0
2006	12,976.2	9,073.5	3,173.9	5,899.7	2,230.4 2,146.2	2,171.3 2,126.3	1,453.9	384.0	1,069.6	718.2	59.4
2007 2008	12,976.2 13,254.1 13,312.2	9,313.9 9,290.9	3,273.7 3,206.0	6,040.8 6,083.1	2,146.2 1,989.4	2,126.3	1,544.3 1,569.7	441.4 486.8	1,097.0 1,068.6	585.0 451.1	19.5 -25.9
2009 P	12,988.7	9,237.3	3,143.7	6,090.5	1,522.8	1,646.7	1,289.1	391.0	887.9	359.1	-111.7
2006: I	12,915.9	8,986.6	3,145.7	5,841.0	2,264.7	2,200.2	1,424.9	364.8	1,060.7	775.2	65.8
	12,962.5	9,035.0	3,150.8	5,884.2	2,261.2	2,189.9	1,450.3	383.7	1,066.3	740.1	72.5
	12,965.9	9,090.7	3,176.4	5,914.3	2,229.6	2.162.2	1,466.0	393.2	1,072.0	697.4	67.5
IV	13,060.7	9,181.6	3,222.5	5,959.4	2,166.0	2,132.9	1,474.5	394.6	1,079.3	660.2	31.8
2007:	13,099.9	9,265.1	3,253.9 3,255.4	6,011.7 6,036.2	2,132.6 2,162.2	2,118.8	1,489.6 1,530.3	409.2 430.7	1,078.1 1,095.2	631.7 610.4	14.5
 	13,204.0 13,321.1	9,291.5 9,335.6	3,255.4	6,055.5	2,162.2	2,137.7 2,135.6	1,565.8	430.7 456.8	1,101.3	572.9	23.3 29.8
IV	13,391.2	9,363.6	3,304.8	6,059.7	2,123.4	2,135.6 2,113.0	1,591.3	469.1	1,113.3	525.0	10.3
2008: I	13,366.9	9,349.6	3,262.1	6,087.1	2,082.9	2,079.2	1,598.9	476.8	1,111.9	483.2	.6
II	13,415.3	9,351.0	3,257.8	6,092.5	2,026.5	2,064.8	1,604.4	493.2	1,097.7	462.9	-37.1
	13,324.6	9,267.7	3,193.6	6,072.4	1,990.7	2,020.4	1,579.2	493.1	1,071.0 993.7	443.3	-29.7 -37.4
N	13,141.9	9,195.3	3,110.4	6,080.4	1,857.7	1,909.3	1,496.1	484.0		415.0	l .
2009: 1	12,925.4 12,901.5	9,209.2 9,189.0	3,129.8 3,105.4	6,076.0 6,078.8	1,558.5 1,456.7	1,687.5 1,631.9	1,321.2 1,288.4	419.4 400.0	887.5 876.5	367.9 344.4	-113.9 -160.2
	12,973.0	9,252.6	3,159.6	6,090.6	1,474.4	1,626.7	1,269.0	380.2	879.8	359.6	-139.2
IV p	13,155.0	9,298.5	3,180.0	6,116.4	1,601.8	1,640.6	1,278.1	364.6	907.7	364.6	-33.5

### TABLE B-2. Real gross domestic product, 1960-2009—Continued

[Billions of chained (2005) dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	N good	et exports ds and serv	of rices	Gov	vernment c and g	onsumption gross invest	n expenditi tment	ıres	Final	Gross	Adden- dum:	from pr	t change receding riod
Year or quarter	Net exports	Exports	Imports	Total	Total	Federal National	Non-	State and local	sales of domes- tic product	domestic pur- chases <sup>1</sup>	Gross national prod- uct <sup>2</sup>	Gross domes- tic	Gross domes- tic pur-
					Total	defense	defense	local				product	chases 1
1960		98.5	114.5	871.0					2,836.6 2,904.6	2,867.6	2,850.6	2.5 2.3	1.8 2.3
1961 1962		99.0 104.0	113.8 126.7	914.8 971.1					2,904.6 3,064.9	2,933.3 3,119.0	2,918.6 3,096.8	6.1	2.3
1963		111.5	130.1	996.1					3,202.6	3,248.8	3,232.8	4.4	6.3 4.2 5.5
1964		124.6	137.0	1,018.0					3,393.7	3,426.3	3,420.4	5.8	5.5
1965 1966		128.1 137.0	151.6 174.1	1,048.7 1,141.1					3,590.7 3,806.6	3,659.2 3,910.2	3,639.5 3,873.1	6.4	6.8
1967		140.1	186.8	1,228.7					3,923.3	4,018.2	3,971.1	6.5 2.5	6.9 2.8
1968		151.1	214.7	1,267.2					4,119.4	4,225.6	4,164.1	4.8	5.2 3.1
1969		158.4	226.9	1,264.3					4,248.6	4,358.6	4,291.6	3.1	3.1
1970 1971		175.5 178.4	236.6 249.2	1,233.7 1,206.9					4,287.9 4,407.4	4,352.0 4,506.9	4,299.4 4,446.0	3.4	2 3.6
1972		191.8	277.2	1,198.1					4,640.6	4.755.8	4,682.9	5.3	5.5
1973 1974		228.0 246.0	290.1 283.5	1,193.9 1,224.0					4,888.2 4,874.1	4,991.2 4,926.2	4,964.5 4,944.0	5.8 6	5.0 -1.3
1975		244.5	252.0	1,251.6					4,926.3	4,872.0	4,921.4	2	-1.1
19/6		255.1 261.3	301.3	1,257.2					5,120.2	5,189.2	5,191.2	5.4 4.6	6.5 5.3
1977 1978		288.8	334.2 363.2	1,271.0 1,308.4					5,344.9 5,639.7	5,464.4 5,763.2	5,433.7 5,733.2	5.6	5.5
1979		317.5	369.2	1,332.8					5,841.2	5,903.3	5,930.2	3.1	2.4
1980		351.7	344.7	1,358.8					5,878.7	5,789.6	5,913.4	3	-1.9
1981 1982		356.0 328.8	353.8 349.3	1,371.2 1,395.3					5,959.5 5,923.3	5,944.7 5.865.4	6,052.5 5,939.1	2.5 -1.9	2.7 -1.3
1983		320.3	393.4	1,446.3					6,172.9	6.208.3	6,202.3	4.5	5.8
1984 1985		346.4 357.0	489.1 520.9	1,494.9 1.599.0					6,495.6 6.838.9	6,745.4 7,045.3	6,639.8 6,893.9	7.2	8.7 4.4
1986		384.4	565.4	1.696.2					7,098.7	7,303.3	7,116.5	3.5	3.7
1987		425.7	598.9	1,737.1					7,296.2	7,518.4	7,342.2	3.2	3.7 2.9 3.2
1988 1989		493.9 550.6	622.4 649.8	1,758.9 1,806.8					7,607.8 7,867.5	7,758.8 7,990.9	7,650.4 7,924.0	4.1 3.6	3.2
1990		600.2	673.0	1,864.0					8,032.7	8,104.6	8,081.8	1.9	1.4
1991		640.0 684.0	672.0	1,884.4 1,893.2					8,034.8	8,034.6 8,309.6	8,055.6 8,326.4	2 3.4	9 3.4
1992 1993		706.4	719.2 781.4	1,878.2					8,284.3 8,515.3	8,592.9	8,563.2	2.9	3.4
1994		768.0	874.6	1,878.0	704.4	470.0		4 400 0	8,809.2	8.976.0	8,900.5	4.1	4.5
1995 1996	-98.8 -110.7	845.7 916.0	944.5 1.026.7	1,888.9 1.907.9	704.1 696.0	476.8 470.4	227.5 225.7	1,183.6 1,211.1	9,073.2	9,189.0 9,542.0	9,129.4 9,471.1	2.5	2.4 3.8
1997	-139.8	1,025.1	1.165.0	1,943.8	689.1	457.2	231.9	1,254.3	9,782.6	9,992.8	9,881.8	4.5	4.7
1998 1999	-252.6 -356.6	1,048.5 1,094.3	1,301.1 1,450.9	1,985.0 2,056.1	681.4 694.6	447.5 455.8	233.7 238.7	1,303.8 1,361.8	10,217.1 10,715.7	10,539.9 11,141.1	10,304.0 10,812.1	4.4 4.8	5.5 5.7
2000	-451.6	1,188.3	1,430.3	2.097.8	698.1	453.5	244.4	1,400.1	11,167.5	11.681.4	11.268.8	4.1	4.8
2001	-472.1	1,121.6	1,593.8	2.178.3	726.5	470.7	255.5	1,452.3	11,391.7	11,825.7	11,404.6	1.1	1.2
2002	-548.8 -603.9	1,099.2 1,116.8	1,648.0	2,279.6	779.5 831.1	505.3 549.2	273.9 281.7	1,500.6 1,499.7	11,543.5	12,107.7 12,449.2	11,606.9	1.8	2.4 2.8
2003 2004	-688.0	1,222.8	1,720.7 1,910.8	2,330.5 2,362.0	865.0	580.4	284.6	1,499.7	11,824.8 12,198.2	12.952.5	11,914.2 12,358.5	3.6	4.0
2005	-722.7	1,305.1	2,027.8	2,369.9	876.3	589.0	287.3	1,493.6	12,588.4	13,361.1	12,735.5	3.1	3.2
2006 2007	-729.2 -647.7	1,422.0 1,546.1	2,151.2 2,193.8	2,402.1 2.443.1	894.9 906.4	598.4 611.5	296.6 294.9		12,917.1 13,234.3	13,705.7 13,901.6	13,046.1 13,362.8	2.7 2.1	2.6 1.4
2008	-494.3	1,629.3	2,123.5	2,518.1	975.9	659.4	316.4	1,543.7	13,341.2	13,801.2	13,442.6	.4	7
2009 P	-353.8	1,468.6	1,822.5	2,566.4	1,026.7	695.1	331.4	1,542.8	11 '	13,335.8	40.004.0	-2.4	-3.4
2006: I	-732.6 -732.8	1,388.8 1,412.1	2,121.3 2.144.9	2,397.1 2.399.1	900.5 892.8	595.6 597.2	305.0 295.7	1,496.6 1,506.3	12,851.3 12,891.0	13,648.7 13,695.5	12,994.2 13.035.4	5.4 1.4	4.7 1.4
	-756.5	1,414.1	2,170.5	2,402.7	892.0	594.3	297.7	1,510.8	12,898.3	13,722.8	13,025.1	.1	.8
IV	-694.9	1,473.2	2,168.1	2,409.4	894.4	606.5	287.8		13,027.8	13,755.7	13,129.5	3.0	1.0
2007:	-705.0 -683.4	1,485.9 1.504.8	2,190.8 2.188.1	2,409.5 2,435.4	882.8 898.7	594.7 607.1	288.1 291.6	1,526.5 1.536.5	13,086.4 13,179.6	13,805.0 13,887.6	13,160.5 13,275.9	1.2	1.4 2.4
	-638.4	1,569.9	2,208.3	2,458.9	919.0	621.7	297.2	1,540.0	13,290.3	13,959.7	13,451.5	3.6	2.1
IV	-564.0	1,624.0	2,188.0	2,468.7	925.1	622.4	302.7	1,543.7	13,381.1	13,954.2	13,563.3	2.1	2
2008:	-550.9 -476.0	1,623.4 1,670.4	2,174.3 2,146.5	2,484.7 2,506.9	943.4 961.3	634.8 645.6	308.6 315.8	1,541.9 1,546.6	13,363.5 13,453.5	13,916.4 13,885.5	13,525.4 13,533.7	7 1.5	-1.1 9
	-479.2	1,655.2	2,134.4	2,536.6	991.6	675.4	315.9	1,547.0	13,354.3	13,/98.8	13,470.7	-2.7	-2.5
IV	-470.9	1,568.0	2,038.9	2,544.0	1,007.3	681.7	325.4	1,539.3	13,193.5	13,604.0	13,240.5	-5.4	-5.5
2009: 1	-386.5 -330.4	1,434.5 1,419.5	1,821.0 1,749.8	2,527.2 2,568.6	996.3 1,023.5	672.8 695.2	323.4 328.2	1,533.3 1,548.0	13,055.8 13,077.8	13,303.1 13,225.9	13,018.1 12,986.8	-6.4 7	-8.6 -2.3 3.0
	-357.4	1,478.8	1,836.2	2,585.5	1,043.3	709.3	333.8	1,545.5	13,127.2	13,323.8	13,084.0	2.2	3.0
IV P	-341.1	1,541.6	1,882.7	2,584.4	1,043.5	703.1	340.4	1,544.3	13,200.2	13,490.3		5.7	5.1

 $<sup>^{\</sup>rm 1}$  Gross domestic product (GDP) less exports of goods and services plus imports of goods and services.  $^{\rm 2}$  GDP plus net income receipts from rest of the world.

Table B–3. Quantity and price indexes for gross domestic product, and percent changes, 1960-2009

[Quarterly data are seasonally adjusted]

		Index	numbers, 200	5=100		,,	Percent char	ge from prece	eding period <sup>1</sup>	
	Gross d	omestic produc	et (GDP)	Personal co expenditu	onsumption ures (PCE)	Gross de	omestic produ	ct (GDP)	Personal co expendit	onsumption ures (PCE)
Year or quarter	Real GDP (chain-type quantity index)	GDP chain-type price index	GDP implicit price deflator	PCE chain-type price index	PCE less food and energy price index	Real GDP (chain-type quantity index)	GDP chain-type price index	GDP implicit price deflator	PCE chain-type price index	PCE less food and energy price index
1960 1961 1962 1963 1964 1965 1966 1966 1967	22.399 22.921 24.310 25.373 26.841 28.565 30.426 31.195 32.705 33.721	18.604 18.814 19.071 19.273 19.572 19.928 20.493 21.124 22.022 23.110	18.596 18.805 19.062 19.265 19.563 19.919 20.484 21.115 22.012 23.099	18.606 18.801 19.023 19.245 19.527 19.810 20.313 20.824 21.636 22.616	19.024 19.262 19.525 19.778 20.081 20.335 20.795 21.432 22.351 23.400	2.5 2.3 6.1 4.4 5.8 6.4 6.5 2.5 4.8 3.1	1.4 1.1 1.4 1.1 1.6 1.8 2.8 3.1 4.3 4.9	1.4 1.1 1.4 1.1 1.5 1.8 2.8 3.1 4.2 4.9	1.6 1.0 1.2 1.2 1.5 1.4 2.5 2.5 3.9 4.5	1.8 1.3 1.4 1.3 1.5 1.3 2.3 3.1 4.3 4.7
1970 1971 1972 1973 1974 1975 1976 1977 1978	33.786 34.920 36.775 38.905 38.691 38.609 40.680 42.550 44.924 46.328	24.328 25.545 26.647 28.124 30.669 33.577 35.505 37.764 40.413 43.773	24.317 25.533 26.634 28.112 30.664 33.563 35.489 37.751 40.400 43.761	23.674 24.680 25.525 26.901 29.703 32.184 33.950 36.155 38.687 42.118	24.498 25.651 26.480 27.492 29.673 32.159 34.114 36.303 38.731 41.550	2 3.4 5.3 5.8 6 2 5.4 4.6 5.6 3.1	5.3 5.0 4.3 5.5 9.0 9.5 5.7 6.4 7.0 8.3	5.3 5.0 4.3 5.5 9.1 9.5 5.7 6.4 7.0 8.3	4.7 4.2 3.4 5.4 10.4 5.5 6.5 7.0 8.9	4.7 4.7 3.2 3.8 7.9 8.4 6.1 6.4 6.7 7.3
1980	46.200 47.373 46.453 48.552 52.041 54.194 56.071 57.866 60.244 62.397	47.776 52.281 55.467 57.655 59.823 61.633 63.003 64.763 66.990 69.520	47.751 52.225 55.412 57.603 59.766 61.576 62.937 64.764 66.988 69.518	46.641 50.810 53.615 55.923 58.038 59.938 61.399 63.589 66.121 68.994	45.356 49.318 52.501 55.220 57.513 59.695 61.945 64.300 67.088 69.856	3 2.5 -1.9 4.5 7.2 4.1 3.5 3.2 4.1 3.6	9.1 9.4 6.1 3.9 3.8 3.0 2.2 2.8 3.4 3.8	9.1 9.4 6.1 4.0 3.8 3.0 2.2 2.9 3.4 3.8	10.7 8.9 5.5 4.3 3.8 3.3 2.4 3.6 4.0 4.3	9.2 8.7 6.5 5.2 4.2 3.8 3.8 4.3 4.1
1990 1991 1992 1993 1994 1995 1996 1997 1998	63.568 63.419 65.571 67.441 70.188 71.953 74.645 77.972 81.367 85.295	72.213 74.762 76.537 78.222 79.867 81.533 83.083 84.554 85.507 86.766	72.201 74.760 76.533 78.224 79.872 81.536 83.088 84.555 85.511 86.768	72.147 74.755 76.954 78.643 80.265 82.041 83.826 85.395 86.207 87.596	72.838 75.673 78.218 80.068 81.836 83.721 85.346 86.981 88.242 89.555	1.9 2 3.4 2.9 4.1 2.5 3.7 4.5 4.4	3.9 3.5 2.4 2.2 2.1 1.9 1.8 1.1	3.9 3.5 2.4 2.2 2.1 2.1 1.9 1.8 1.1	4.6 3.6 2.9 2.2 2.1 2.2 2.2 1.9 1.0	4.3 3.9 3.4 2.4 2.2 2.3 1.9 1.9 1.4
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 P	88.825 89.783 91.412 93.688 97.036 100.000 102.673 104.872 105.331 102.772	88.648 90.654 92.113 94.099 96.769 100.000 103.263 106.221 108.481 109.754	88.647 90.650 92.118 94.100 96.770 100.000 103.257 106.214 108.483 109.777	89.777 91.488 92.736 94.622 97.098 100.000 102.746 105.502 109.031 109.252	91.111 92.739 94.345 95.784 97.788 100.000 102.292 104.699 107.207 108.828	4.1 1.1 1.8 2.5 3.6 3.1 2.7 2.1 .4 -2.4	2.2 2.3 1.6 2.2 2.8 3.3 2.9 2.1 1.2	2.2 2.3 1.6 2.2 2.8 3.3 3.3 2.9 2.1 1.2	2.5 1.9 1.4 2.0 2.6 3.0 2.7 2.7 3.3	1.7 1.8 1.7 1.5 2.1 2.3 2.3 2.4 2.4
2006: I II IV	102.196 102.564 102.592 103.341	102.071 102.980 103.763 104.237	102.071 102.973 103.756 104.218	101.803 102.567 103.316 103.298	101.325 102.057 102.630 103.154	5.4 1.4 .1 3.0	3.0 3.6 3.1 1.8	3.0 3.6 3.1 1.8	1.7 3.0 3.0 1	2.0 2.9 2.3 2.1
2007: I II IV	103.652 104.475 105.402 105.957	105.327 106.026 106.460 107.072	105.310 106.008 106.447 107.069	104.250 105.074 105.681 107.005	103.862 104.318 104.904 105.714	1.2 3.2 3.6 2.1	4.2 2.7 1.6 2.3	4.3 2.7 1.7 2.4	3.7 3.2 2.3 5.1	2.8 1.8 2.3 3.1
2008: III	105.764 106.147 105.430 103.984	107.577 108.061 109.130 109.155	107.534 108.069 109.172 109.172	107.974 109.021 110.273 108.855	106.333 106.976 107.652 107.866	7 1.5 -2.7 -5.4	1.9 1.8 4.0	1.7 2.0 4.1	3.7 3.9 4.7 -5.0	2.4 2.4 2.6 .8
2009: I	102.271 102.082 102.648 104.088	109.661 109.656 109.763 109.934	109.691 109.686 109.783 109.946	108.449 108.814 109.510 110.235	108.173 108.712 109.027 109.400	-6.4 7 2.2 5.7	1.9 .0 .4 .6	1.9 .0 .4 .6	-1.5 1.4 2.6 2.7	1.1 2.0 1.2 1.4

<sup>&</sup>lt;sup>1</sup> Quarterly percent changes are at annual rates.

TABLE B-4. Percent changes in real gross domestic product, 1960-2009

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

		nption s	Gross	private don	nestic inves	stment	Expor imports and se	of goods		Government consumption expenditures and gross investment			
	Gross domes-				Noni	residential	fixed						
Year or quarter	tic product	Total	Goods	Services	Total	Struc- tures	Equip- ment and soft- ware	Resi- dential fixed	Exports	Imports	Total	Federal	State and local
1960   1961   1962   1963   1964   1965   1965   1969   1970   1971   1972   1974   1975   1977   1977   1977   1978   1979   1978   1979   1978   19	233	2.7 2.1 4.9 4.1 6.0 6.3 3.0 5.3 8.8 2.3 5.0 4.2 4.4 4.1 5.7 5.2 4.1 4.1 5.7 3.1 4.0 2.8 2.1 3.6 3.6 3.7 2.3 3.6 4.2 4.4 4.1 5.7 3.0 5.2 4.1 3.0 5.2 4.1 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2	1.8	3.97 4.72 4.00 5.50 4.13 5.50 4.14 5.50 3.83 4.17 3.11 5.29 3.83 4.17 3.11 5.29 3.13 4.14 5.20 3.20 3.20 3.21 3.21 3.21 3.21 3.21 3.21 3.21 3.21	5.76 8.77 5.68 11.99 17.45 12.55 14.68 -9.99 4.99 11.33 15.00 10.1 -33 5.77 -3.88 -1.36 -2.98 -5.52 5.54 -5.42 3.87 9.99 10.5 9.88 7.99 10.5 9.88 7.99 10.5 9.88 7.99 10.5 9.88 11.04 11.0	8.0 1.4 4.6 1.2 10.4 15.9 6.8 -2.5 1.5 -1.6 -1.5 -1.6 -1.8 8.0 -1.6 -1.8 8.0 -1.6 -1.8 -1.7 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.6 -1.8 -1.7 -1.8 -1.9 -1.9 -1.9 -1.9 -1.9 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1.8 -1.0 -1	4.2 -1.9 11.64 12.8 18.30 -7.7 6.8 -1.00 12.9 18.36 -9.55 6.3 15.1 15.2 -2.6 7.3 12.5 11.9 12.5 14.1 10.6 11.9 12.5 12.5 14.1 10.6 11.9 12.5	-7.1 3 9.6 6 11.8 5.8 -2.9 -3.1 13.6 6.3 3.0 -6.0 27.4 17.8 -20.6 -21.5 6.3 3.7 -21.2 -8.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 2.0 -13.0 -13.0 2.0 -13.0 -	17.4 .55.0 7.2 11.8 2.8 2.9 4.8 10.7 7.5 18.9 -6 4.2 4.4 10.5 10.8 10.7 10.8 10	1.37 -1.14 2.7 5.33 10.69 14.9 15.7 4.33 5.7 11.33 -1.1.1 19.9 8.7 12.6 2.6 10.9 12.6 3.9 4.4 4.5 11.5 13.0 13.5 11.5 13.0 13.5 11.5 13.0 13.5 13.0 14.4 14.4 15.1 16.1 16.1 16.1 16.1 17.8 17.8 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18	0.20 6.22 3.00 6.22 3.00 7.77 -2.44 -2.22 -2.7 -2.44 1.11 2.9 1.99 1.88 3.77 3.19 1.99 1.88 3.77 3.19 2.10 3.10 3.10 3.10 3.10 3.10 3.10 3.10 3	-2.7 4.2 8.5 1.1 -1.3 0.1 11.0 10.0 8 -3.4 -7.4 -7.7 -4.1 -4.2 9 3.3 0.2.1 2.5 2.4 4.7 3.6 6.6 1.6 2.0 -1.8 -3.9 -2.7 -1.2 -1.1 1.3 2.1 1.3 7.7 2.1 1.3 2.1 1.3 7.7 5.1 -3.4 -1.1 -5.1	4.44 4.44 6.87 6.88 6.77 5.94 2.88 3.77 .74 3.33 3.77 .74 3.35 .71 .72 .90 .12 .23 .34 .37 .41 .21 .21 .21 .22 .23 .38 .37 .44 .37 .43 .33 .37 .44 .37 .37 .37 .37 .37 .37 .37 .37
III	3.6 2.1 7 1.5	1.9 1.2 6 .1 -3.5	3.1 3.0 -5.1 5 -7.7	1.3 .3 1.8 .4 –1.3	9.6 6.7 1.9 1.4 –6.1	26.6 11.2 6.8 14.5 1	6.5 2.2 4.5 5 -5.0 -9.4	-22.4 -29.5 -28.2 -15.8 -15.9	18.5 14.5 1 12.1 -3.6	3.7 -3.6 -2.5 -5.0 -2.2	3.9 1.6 2.6 3.6 4.8	9.3 2.7 8.1 7.8 13.2	1.0 1.0 5 1.2
2009: I	5.4 6.4 7 2.2	-3.5 -3.1 .6 9 2.8 2.0	-7.7 -10.0 2.5 -3.1 7.2 2.6	-1.3 .5 3 .2 .8 1.7	-5.1 -19.5 -39.2 -9.6 -5.9 2.9	-1 -7.2 -43.6 -17.3 -18.4 -15.4	-9.4 -25.9 -36.4 -4.9 1.5 13.3	-15.9 -23.2 -38.2 -23.3 18.9 5.7	-3.6 -19.5 -29.9 -4.1 17.8 18.1	-2.2 -16.7 -36.4 -14.7 21.3 10.5	4.8 1.2 -2.6 6.7 2.6 2	6.5 -4.3 11.4 8.0	-2.0 -1.5 3.9 6 3

Note: Percent changes based on unrounded data.

Table B-5. Contributions to percent change in real gross domestic product, 1960-2009

[Percentage points, except as noted; quarterly data at seasonally adjusted annual rates]

				nsumption e		,			ate domestic			
		Gross						Fi	xed investme	ent		
Yea	ar or quarter	domestic product	T	0 1	0 .	T		1	Vonresidentia	al		Change in
		(percent change)	Total	Goods	Services	Total	Total	Total	Structures	Equip- ment and software	Resi- dential	private inven- tories
1961 1962 1963 1964 1965 1966 1967 1977 1978 1970 1971 1973 1974 1975 1976 1976 1987 1988 1989 1980 1991 1992 1993 1994 1995 1995 1995 2000 2006 2007		2.5.2.3.4.4.4.8.4.1.1.1.8.5.2.9.4.1.1.2.5.4.6.3.1.1.1.8.2.3.6.3.1.1.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.5.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.1.8.2.3.6.6.3.1.1.3.0.2.3.2.2.1.1.3.0.2.3.2.2.3.3.6.3.2.1.2.2.3.2.2.3.3.6.3.2.2.3.2.2.3.3.6.3.2.2.2.3.3.6.3.2.2.2.2	1.72 1.30 3.10 2.56 3.91 3.50 1.82 3.51 3.50 1.82 3.51 2.69 2.77 1.44 2.37 1.40 3.51 2.66 2.77 1.44 2.77 1.40 3.65 3.43 2.62 2.61 2.64 1.80 2.77 2.57 1.81 2.35 2.48 3.68 3.44 1.70 2.77 2.42 2.42 2.44 1.87 1.87 2.49 2.59 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.44 3.50 3.68 3.68 3.68 3.68 3.68 3.68 3.68 3.68	0.60 211 1.68 1.29 1.91 2.26 2.02 1.925 2.44 1.27 1.97 1.57 -1.12 2.0 2.08 1.28 1.22 4.7 4.7 4.1 1.49 1.94 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.	1.13 1.09 1.42 1.27 1.78 1.66 1.48 1.21 1.59 1.34 1.19 1.10 1.20 1.33 1.56 1.02 1.43 1.38 1.56 1.02 1.13 1.13 1.56 1.02 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.1	0.00 -1.00 -1.181 -1.00 -1.10 -1.25 -1.16 -1.90 -1.04 -1.67 -1.91	0.13	0.52 -0.66 -0.78 -0.70 -	0.28	0.2411616616616616617617617618707708709	-0.39 0.11 4.66 5.58 4.33 -1.55 -1.33 -2.66 1.100 4.61 -1.33 -5.57 -5.55 -1.41 -1.37 -3.57 -3.51 -1.17 -3.55 -1.44 -3.37 -3.57 -3.51	-0.133 -0.55 -0.57 -0.88 -0.88 -0.49 -0.100 -0.73 -0.58 -0.59 -0.50 -0.5
	          V	7 1.5 -2.7 -5.4 -6.4	39 .06 -2.49 -2.15	-1.24 12 -1.89 -2.41	.85 .17 60 .26	-1.20 -1.66 -1.04 -3.91 -8.98	99 41 -1.30 -3.28 -6.62	.25 .19 73 -2.47 -5.29	.27 .56 .00 31 -2.28	02 38 73 -2.15 -3.01	-1.24 60 57 81 -1.33	21 -1.25 .26 64 -2.36
	       <i>P</i>	-0.4 7 2.2 5.7	62 1.96 1.44	71 1.59 .61	.09 .37 .83	-3.10 .54 3.82	-1.68 15 .43	-1.01 59	69 68 52	32 .10 .81	-1.53 67 .43 .14	-1.42 .69 3.39

Table B–5. Contributions to percent change in real gross domestic product, 1960-2009-Continued

[Percentage points, except as noted; guarterly data at seasonally adjusted annual rates]

				s of goods a		,		y adjusted Go	overnment (		n expenditur ment	es
Year or quarter			Exports			Imports				Federal		State
	Net exports	Total	Goods	Services	Total	Goods	Services	Total	Total	National defense	Non- defense	and local
1960	0.72 .06 21 .24 .36 30 29 22 30 04 .34 19 21	0.78 .03 .25 .35 .59 .15 .36 .12 .41 .25 .56 .10	0.76 .02 .17 .29 .52 .02 .27 .02 .30 .20 .44 02 .43 1.01	0.02 .01 .08 .06 .07 .13 .09 .10 .05 .12 .11 01	-0.06 .03 47 12 23 45 65 34 71 29 22 29 63	0.05 .00 40 12 19 41 68 167 20 15 33 57 34	-0.11 .02 07 .00 04 04 16 16 03 09 07 .04 06	0.04 1.07 1.36 .58 .49 .65 1.87 1.68 .73 05 55 50 16 08	-0.35 .51 1.07 .01 17 01 1.24 1.17 .10 42 86 85 42 41	-0.17 .45 .632539 1.21 1.19 .164983976039	-0.18 .06 .44 .26 .23 .19 .03 02 06 03 .12 .18 02	0.39 .56 .29 .57 .65 .66 .63 .51 .63 .37 .31 .36 .26
1975 1976 1977 1978 1979	.89 -1.08 72 .05	05 .37 .20 .82 .82	16 .31 .08 .68 .77	.10 .05 .11 .15 .06	.94 -1.45 92 78 16	.87 -1.35 84 67 14	.07 10 07 11 02	.48 .10 .23 .60 .37	.03 .00 .19 .22 .20	06 02 .07 .05	.09 .03 .12 .16 .03	.45 .09 .04 .38
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	1.68 15 60 -1.35 -1.58 42 30 16 82	.97 .12 73 22 .63 .23 .54 .77 1.24	.86 09 67 19 .46 .20 .26 .56 1.04	.11 06 03 .17 .02 .28 .21 .20	.71 27 -1.13 -2.21 65 84 61 43	.67 18 .20 -1.01 -1.83 52 82 39 36 38	.04 09 08 13 39 13 02 22 07 09	.38 .19 .35 .76 .70 1.41 1.27 .51 .26	.39 .42 .35 .63 .30 .74 .55 .35 16	.25 .38 .48 .50 .35 .60 .47 .35 –.03	.14 .04 -13 .13 05 .14 .08 .00 12	01 23 .01 .13 .40 .67 .71 .17 .42
1990 1991 1992 1993 1994 1995 1996 1997 1998	.32 .43 .64 05 57 43 .11 15 32 -1.18 99	.81 .63 .68 .32 .85 1.03 .90 1.30 .26	.75 .56 .46 .52 .23 .67 .85 .68 1.11 .18	.26 .16 .10 .19 .19 .22 .19 .08	38 .02 72 90 -1.28 92 -1.04 -1.62 -1.43 -1.45	26 04 78 85 -1.18 86 94 -1.44 -1.21 -1.31	13 .05 .06 05 10 06 10 17 22	.64 .22 .10 16 .00 .11 .19 .34 .38	.18 02 16 33 30 20 08 07 07	.00 07 32 31 27 19 06 13 09	.17 .18 .05 .16 02 04 01 02 .06 .02	.46 .24 .26 .17 .30 .27 .41 .45
2000 2001 2002 2003 2004 2005 2006 2007 2007 2008 2009 p	85 20 65 45 66 27 05 .63 1.20	.91 61 20 .15 .89 .67 .93 .96 .64 -1.21	.82 48 25 .12 .55 .52 .68 .57 .48 -1.04	.08 13 .05 .03 .34 .15 .25 .39 .16 16	-1.76 41 46 60 -1.55 94 98 33 .56 2.28	-1.52 .39 42 55 -1.29 87 80 24 .58 2.18	24 .02 04 04 26 07 18 09 02	.36 .67 .84 .42 .26 .06 .26 .32 .59	.03 .24 .44 .43 .28 .09 .15 .09 .53	02 .14 .28 .36 .26 .07 .07 .10 .37	.05 .09 .15 .07 .02 .02 .07 01 .16	.33 .43 .40 01 02 03 .11 .23 .06
2006: I	.44 .02 71 1.94 29	1.64 .72 .06 1.84 .39	1.23 .54 .01 .96 .23 .48	.41 .18 .05 .87 .16	-1.20 70 78 .10 68	81 66 74 .35 67	39 05 04 25 01 05	.75 .06 .11 .21 .00	.79 24 03 .08 36	.46 .05 09 .38 37	.32 29 .06 30 .01	03 .30 .14 .14 .36 .32
2008: I	1.36 2.24 .36 2.35 10 .45	1.99 1.65 02 1.47 48 -2.67	1.11 .97 .34 1.17 17 -2.50	.88 .68 36 .30 31 17	63 .60 .38 .88 .38 3.12	41 .51 .46 .67 .55 3.09	22 .08 08 .21 17 .03	.75 .31 .51 .71 .95 .24	.63 .19 .56 .55 .93	.46 .03 .39 .34 .93	.17 .16 .17 .21 .00 .29	.11 .12 05 .15 .01 25
2009: I II IV P	2.64 1.65 81 .50	-3.95 45 1.78 1.90	-3.41 45 1.58 1.90	54 .00 .20 .00	6.58 2.09 -2.59 -1.41	6.25 1.89 -2.41 -1.55	.34 .21 18 .14	52 1.33 .55 02	33 .85 .62 .02	27 .70 .45 19	06 .15 .17 .21	19 .48 08 04

Table B-6. Chain-type quantity indexes for gross domestic product, 1960-2009

[Index numbers, 2005=100; quarterly data seasonally adjusted]

			onsumption ex		quarterry date			nestic investm	ent	
							F	ixed investme	nt	
Year or quarter	Gross domestic product	Takal	0	0	Takal			Nonresidentia	I	
	product	Total	Goods	Services	Total	Total	Total	Structures	Equip- ment and software	Resi- dential
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	22,399 22,921 24,310 25,373 26,841 28,565 30,426 31,195 32,705 33,721 33,786	20,233 20,650 21,671 22,564 23,908 25,420 26,862 27,667 29,263 30,359 31,071	19.767 19.892 20.915 21.750 23.047 24.679 26.245 26.758 28.415 29.283 29.514	19.850 20.581 21.554 22.470 23.807 25.122 26.367 27.451 28.915 30.204 31.385	13.650 13.561 15.283 16.309 17.654 20.131 21.905 20.903 22.120 23.409 21.871	13.974 13.931 15.190 16.367 17.948 19.781 20.915 20.530 21.962 23.329 22.838	10.796 10.729 11.666 12.315 13.777 16.177 18.200 17.955 18.756 20.181	48.488 49.151 51.393 51.986 57.399 66.553 71.109 69.313 70.299 74.096 74.300	5.499 5.393 6.017 6.524 7.356 8.705 10.098 10.031 10.656 11.598	26.167 26.240 28.756 32.145 34.013 33.020 30.065 29.119 33.089 34.066 32.028
1970 1971 1972 1973 1974 1975 1976 1977 1978	33.760 34.920 36.775 38.905 38.691 38.609 40.680 42.550 44.924 46.328	31.071 32.255 34.239 35.935 35.637 36.445 38.475 40.094 41.862 42.857	29.514 30.749 32.760 34.457 33.200 33.425 35.766 37.301 38.842 39.464	31.365 32.469 34.346 35.974 36.664 38.040 39.672 41.312 43.234 44.555	21.071 24.365 27.250 30.443 28.200 23.205 27.893 32.107 35.978 37.125	24.568 27.522 30.037 28.159 25.135 27.613 31.582 35.406 37.404	20.073 20.074 21.917 25.106 25.316 22.814 23.931 26.632 30.618 33.702	74.300 73.082 75.359 81.520 79.755 71.355 73.073 76.079 87.058 98.098	11.402 11.596 13.092 15.494 15.890 14.377 15.276 17.577 20.253 22.022	32.026 40.811 48.064 47.756 37.897 32.977 40.743 49.490 52.606 50.676
1980 1981 1982 1983 1984 1985 1986 1987 1988	46.200 47.373 46.453 48.552 52.041 54.194 56.071 57.866 60.244 62.397	42.705 43.353 43.958 46.471 48.935 51.484 53.572 55.225 57.451 59.075	38.464 38.919 39.190 41.684 44.688 47.039 49.670 50.564 52.442 53.766	45.241 46.053 46.950 49.407 51.341 53.996 55.602 57.818 60.272 62.098	33.047 36.019 30.972 33.857 43.833 43.425 43.129 44.458 45.504 47.330	34.974 35.756 33.249 35.673 41.698 43.891 44.402 44.646 46.118 47.504	33.613 35.528 34.190 33.748 39.704 42.336 41.126 41.096 43.245 45.660	103.837 112.161 110.325 98.404 112.125 120.095 106.935 103.859 104.539 106.616	21.230 22.133 20.982 22.111 26.497 28.180 28.714 29.107 31.302 33.596	39.952 36.749 30.077 42.527 48.839 49.612 55.699 56.811 56.235 54.528
1990 1991 1992 1993 1994 1995 1996 1997 1998	63.568 63.419 65.571 67.441 70.188 71.953 74.645 77.972 81.367 85.295	60.281 60.371 62.430 64.647 67.115 68.931 71.336 73.970 77.849 82.106	54.099 53.025 54.696 56.969 59.973 61.765 64.530 67.607 72.175 77.924	63.942 64.899 67.212 69.363 71.433 73.249 75.394 77.719 81.145 84.469	45.736 42.016 45.421 49.481 56.204 57.955 63.082 70.932 78.034 84.903	46.512 43.496 46.075 50.024 54.703 58.226 63.448 69.302 76.822 83.969	45.885 43.425 44.811 48.723 53.207 58.801 64.293 72.053 80.707 89.129	108.187 96.150 90.354 89.768 91.405 97.235 102.744 110.280 115.911 116.049	33.607 32.743 35.129 39.515 44.227 49.519 54.782 62.315 71.358 81.451	49.823 45.035 51.267 55.454 60.845 58.854 64.756 69.737 74.098
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 P	88.825 89.783 91.412 93.688 97.036 100.000 102.673 104.872 105.331 102.772	86.270 88.603 90.962 93.520 96.754 100.000 102.886 105.612 105.351 104.744	82.034 84.611 88.050 92.060 96.141 100.000 103.251 106.499 104.296 102.270	88.654 90.837 92.568 94.314 97.084 100.000 102.692 105.147 105.883 106.012	90.704 84.333 83.185 86.162 94.753 100.000 102.678 98.801 91.585 70.104	90.178 88.470 84.726 87.464 93.884 100.000 102.309 100.189 95.106 77.590	97.864 95.137 87.593 88.398 93.743 100.000 107.913 114.617 116.502 95.681	125.101 123.191 101.377 97.514 98.571 100.000 109.180 125.495 138.392 111.171	89.976 87.073 83.397 85.516 92.141 100.000 107.434 110.184 107.332 89.181	74.839 75.263 79.210 85.724 94.136 100.000 92.679 75.490 58.213 46.341
2006:            	102.196 102.564 102.592 103.341	101.901 102.450 103.081 104.112	102.335 102.501 103.334 104.835	101.670 102.421 102.945 103.731	104.258 104.098 102.643 99.712	103.670 103.186 101.880 100.499	105.759 107.643 108.811 109.440	103.696 109.068 111.771 112.185	106.542 107.101 107.681 108.414	100.031 95.502 89.988 85.194
2007:            	103.652 104.475 105.402 105.957	105.059 105.358 105.858 106.175	105.854 105.904 106.724 107.513	104.641 105.068 105.403 105.477	98.176 99.539 99.736 97.753	99.838 100.726 100.626 99.564	110.561 113.579 116.219 118.109	116.327 122.437 129.869 133.348	108.285 110.007 110.615 111.829	81.521 78.764 73.932 67.745
2008: I II IV	105.764 106.147 105.430 103.984	106.016 106.032 105.088 104.267	106.121 105.983 103.895 101.186	105.953 106.047 105.697 105.837	95.887 93.292 91.643 85.519	97.969 97.291 95.199 89.964	118.674 119.083 117.210 111.040	135.559 140.215 140.191 137.603	111.685 110.258 107.577 99.808	62.355 59.738 57.208 53.549
2009:            V <sup>p</sup>	102.271 102.082 102.648 104.088	104.425 104.196 104.917 105.437	101.817 101.023 102.789 103.451	105.761 105.809 106.014 106.464	71.746 67.059 67.874 73.738	79.514 76.895 76.647 77.304	98.061 95.623 94.183 94.858	119.243 113.716 108.074 103.650	89.143 88.036 88.370 91.174	47.478 44.436 46.403 47.046

Table B-6. Chain-type quantity indexes for gross domestic product, 1960-2009—Continued [Index numbers, 2005=100; quarterly data seasonally adjusted]

	Exports of	of goods and			of goods and		Governmen		n expenditur	es and gross	investment
Year or quarter	,							· ·	Federal		State
	Total	Goods	Services	Total	Goods	Services	Total	Total	National defense	Non- defense	and local
1960 1961 1962 1963 1964 1965 1966 1967 1968	7.548 7.588 7.971 8.541 9.547 9.815 10.495 10.737 11.580 12.140	7.139 7.175 7.494 8.083 9.190 9.239 9.880 9.927 10.713 11.274	8.500 8.552 9.141 9.605 10.180 11.215 11.986 12.932 13.925 14.442	5.649 5.611 6.248 6.416 6.757 7.476 8.587 9.213 10.586 11.189	4.224 4.218 4.843 5.039 5.372 6.132 7.099 7.473 9.016 9.510	14.535 14.287 14.954 14.943 15.328 15.779 17.783 19.957 20.315 21.596	36.751 38.600 40.977 42.032 42.958 44.250 48.149 51.844 53.472 53.347	53.496 55.739 60.488 60.526 59.725 59.697 66.303 72.903 73.491 70.969	67.385 70.368 74.623 72.838 69.951 68.481 78.306 88.567 90.001 85.556	26.830 27.642 33.377 36.946 40.157 42.878 43.320 42.913 41.897 43.019	26.338 27.961 28.818 30.552 32.626 34.813 36.998 38.868 41.168 42.557
1970 1971 1972 1973 1974 1975 1976 1977 1978	13.445 13.674 14.700 17.471 18.852 18.732 19.550 20.021 22.132 24.326	12.560 12.511 13.856 17.038 18.391 17.964 18.817 19.063 21.193 23.697	15.729 16.942 16.835 18.025 19.432 20.626 21.236 22.606 24.496 25.250	11.666 12.289 13.672 14.306 13.982 12.428 14.858 16.483 17.911 18.208	9.882 10.711 12.168 13.027 12.665 11.069 13.572 15.226 16.591 16.876	22.722 22.075 23.011 22.235 22.210 21.247 22.714 23.846 25.546 25.897	52.059 50.926 50.556 50.379 51.648 52.812 53.049 53.630 55.210 56.241	65.738 60.677 58.197 55.748 56.243 56.426 56.453 57.647 59.092 60.519	77.800 68.981 63.588 60.061 59.595 59.030 58.828 59.511 60.019 61.845	42.567 44.575 47.722 47.429 49.891 51.594 52.085 54.324 57.700 58.309	43.738 45.077 46.068 47.381 49.164 50.970 51.346 51.532 53.216 53.998
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	26.946 27.277 25.193 24.543 26.546 27.352 29.451 32.619 37.844 42.193	26.521 26.234 23.863 23.177 25.009 25.931 27.263 30.286 35.992 40.281	26.826 29.683 28.860 28.380 30.911 31.279 35.820 39.390 42.939 47.375	16.999 17.446 17.226 19.400 24.122 25.687 27.883 29.532 30.693 32.045	15.623 15.945 15.544 17.656 21.927 23.299 25.687 26.878 27.966 29.171	25.319 26.778 28.205 30.483 38.126 41.026 41.488 46.378 47.954 50.278	57.337 57.860 58.876 61.027 63.078 67.471 71.573 73.300 74.220 76.240	63.390 66.420 68.989 73.561 75.829 81.771 86.407 89.477 88.010 89.379	64.541 68.628 73.814 79.110 82.971 90.002 95.766 100.301 99.826 99.335	61.573 62.396 59.402 62.471 61.279 64.900 67.130 67.081 63.499 68.795	53.958 52.873 52.898 53.514 55.444 58.879 62.669 63.575 65.933 68.340
1990 1991 1992 1993 1994 1995 1996 1997 1998	45.989 49.042 52.410 54.127 58.847 64.805 70.186 78.550 80.343 83.849	43.671 46.685 50.177 51.812 56.853 63.505 69.106 79.042 80.805 83.880	52.372 55.505 58.496 60.437 64.275 68.316 73.101 77.436 79.303 83.857	33.191 33.142 35.466 38.532 43.129 46.580 50.631 57.450 64.165 71.550	30.020 30.156 32.999 36.301 41.149 44.855 49.060 56.130 62.780 70.609	53.564 52.173 50.768 52.124 54.901 56.556 59.514 64.687 71.721 76.569	78.655 79.514 79.885 79.253 79.245 79.705 80.507 82.020 83.759 86.761	91.185 91.000 89.351 85.842 82.555 80.353 79.423 78.641 77.758 79.270	99.305 98.214 93.351 88.401 84.072 80.936 79.856 77.618 75.978 77.386	74.465 76.170 81.218 80.687 79.525 79.207 78.577 80.737 81.374 83.095	71.112 72.585 74.156 75.244 77.197 79.247 81.090 83.980 87.291 91.179
2000	91.054 85.946 84.224 85.574 93.698 100.000 108.962 118.472 124.842 112.532	93.182 87.414 84.268 85.773 93.025 100.000 109.416 117.512 124.436 108.933	86.102 82.534 84.115 85.107 95.237 100.000 107.935 120.644 125.759 120.467	80.871 78.596 81.270 84.857 94.231 100.000 106.086 108.188 104.721 89.874	80.086 77.530 80.409 84.363 93.660 100.000 105.904 107.709 103.472 86.599	84.955 84.292 85.837 87.474 97.252 100.000 107.059 110.754 111.478 107.225	88.519 91.917 96.192 98.336 99.668 100.000 101.359 103.090 106.252 108.293	79.661 82.901 88.953 94.839 98.710 100.000 102.127 103.434 111.362 117.158	76.986 79.908 85.782 93.243 98.535 100.000 101.588 103.806 111.939 118.003	85.066 88.945 95.357 98.071 99.067 100.000 103.237 102.653 110.153 115.381	93.744 97.236 100.473 100.408 100.234 100.000 100.910 102.886 103.355 103.293
2006:         	106.415 108.200 108.353 112.882	107.085 109.021 109.069 112.488	104.897 106.339 106.729 113.773	104.613 105.774 107.040 106.917	104.376 105.665 107.100 106.476	105.888 106.358 106.715 109.276	101.147 101.232 101.386 101.670	102.763 101.887 101.792 102.066	101.115 101.384 100.892 102.963	106.163 102.927 103.653 100.203	100.205 100.851 101.149 101.437
2007:            	113.856 115.302 120.293 124.436	113.311 115.048 119.075 122.613	115.087 115.871 123.050 128.568	108.041 107.907 108.904 107.901	107.792 107.527 108.277 107.239	109.381 109.950 112.250 111.435	101.671 102.764 103.757 104.169	100.738 102.558 104.871 105.570	100.952 103.059 105.546 105.668	100.282 101.505 103.457 105.367	102.203 102.875 103.110 103.356
2008: I II IV	124.395 127.997 126.828 120.149	123.873 128.016 127.446 118.407	125.587 127.965 125.429 124.054	107.225 105.853 105.259 100.547	106.290 105.035 104.045 98.517	112.249 110.211 111.849 111.605	104.845 105.782 107.036 107.346	107.654 109.698 113.152 114.946	107.760 109.597 114.668 115.732	107.442 109.925 109.956 113.288	103.234 103.549 103.576 103.061
2009:                  V P	109.922 108.766 113.315 118.127	105.520 103.817 109.695 116.699	119.619 119.649 121.293 121.308	89.804 86.292 90.554 92.846	86.326 82.520 87.270 90.279	108.238 106.160 107.962 106.542	106.639 108.386 109.097 109.051	113.693 116.801 119.057 119.080	114.219 118.014 120.419 119.360	112.576 114.259 116.203 118.487	102.660 103.640 103.479 103.394

Table B-7. Chain-type price indexes for gross domestic product, 1960-2009

[Index numbers, 2005=100, except as noted; quarterly data seasonally adjusted]

		·	onsumption ex	penditures	- Hotcu, quai			nestic investr	nent	
							F	ixed investme	nt	
Year or quarter	Gross domestic	T	0 1		T			Nonresidentia	I	
	product	Total	Goods	Services	Total	Total	Total	Structures	Equip- ment and software	Resi- dential
1960 1961 1962 1963 1963 1964 1965 1966 1967 1967	18.604 18.814 19.071 19.273 19.572 19.928 20.493 21.124 22.022 23.110	18.606 18.801 19.023 19.245 19.527 19.810 20.313 20.824 21.636 22.616	29.144 29.253 29.404 29.648 29.971 30.286 30.953 31.499 32.597 33.860	13.581 13.827 14.090 14.306 14.573 14.846 15.277 15.786 16.468 17.326	26.607 26.533 26.548 26.463 26.613 27.037 27.592 28.320 29.378 30.770	25.530 25.449 25.465 25.391 25.545 25.981 26.528 27.271 28.367 29.767	33.978 33.788 33.784 33.955 34.342 34.854 35.741 36.999 38.527	11.516 11.446 11.537 11.636 11.801 12.143 12.580 12.973 13.621 14.518	54.445 54.146 53.878 53.581 53.558 53.607 53.749 54.940 56.416 57.985	12.962 12.983 13.003 12.901 13.003 13.372 13.857 14.339 15.100 16.144
1970 1971 1972 1973 1974 1975 1976 1977 1978	24.328 25.545 26.647 28.124 30.669 33.577 35.505 37.764 40.413 43.773	23.674 24.680 25.525 26.901 29.703 32.184 33.950 36.155 38.687 42.118	35.152 36.208 37.135 39.350 44.261 47.837 49.709 52.363 55.576 60.832	18.287 19.285 20.103 21.078 22.868 24.836 26.558 28.560 30.779 33.353	32.072 33.671 35.077 36.972 40.648 45.666 48.190 51.805 56.030 61.099	31.047 32.611 34.009 35.888 39.422 44.361 46.932 50.616 54.891 59.866	40.348 42.246 43.673 45.355 49.733 56.581 59.718 63.805 68.078 73.606	15.473 16.664 17.863 19.247 21.910 24.534 25.741 27.973 30.675 34.238	60.119 61.905 62.651 63.716 68.414 78.523 83.143 88.083 92.731 98.610	16.666 17.632 18.703 20.359 22.460 24.547 26.124 28.759 32.281 35.902
1980 1981 1982 1983 1984 1985 1986 1987 1988	47.776 52.281 55.467 57.655 59.823 61.633 63.003 64.763 66.990 69.520	46.641 50.810 53.615 55.923 58.038 59.938 61.399 63.589 66.121 68.994	67.644 72.669 74.650 75.997 77.435 78.677 78.309 80.827 82.958 86.150	36.805 40.558 43.712 46.433 48.850 51.053 53.378 55.413 58.127 60.844	66.836 73.154 76.899 76.706 77.256 78.047 79.737 81.263 83.120 85.107	65.468 71.551 75.468 75.349 75.790 76.744 78.579 80.036 82.111 84.099	80.098 87.832 92.670 91.843 91.621 92.340 93.908 94.753 96.857 98.890	37.421 42.567 45.927 44.757 45.147 46.219 47.106 47.863 49.895 51.848	107.032 114.681 119.155 119.406 118.364 118.221 120.094 120.750 122.256 123.786	39.789 43.036 45.340 46.380 47.714 48.944 50.994 53.795 54.913 56.680
1990	72.213 74.762 76.537 78.222 79.867 81.533 83.083 84.554 85.507 86.766	72.147 74.755 76.954 78.643 80.265 82.041 83.826 85.395 86.207 87.596	89.678 91.870 92.978 93.786 94.740 95.625 96.676 95.106 95.603	63.812 66.586 69.240 71.299 73.205 75.370 77.479 79.817 81.695 83.515	86.747 87.981 87.672 88.673 89.828 90.840 90.455 90.120 89.109 88.989	85.808 87.082 86.831 87.838 89.023 90.060 89.817 89.589 88.756 88.700	100.783 102.341 101.488 101.540 102.029 102.247 101.054 99.775 97.587 96.173	53.522 54.491 54.502 56.103 58.089 60.601 62.141 64.516 67.480 69.559	125.780 125.389 127.178 125.681 124.408 123.695 122.265 119.323 115.788 110.641 107.406	58.060 58.071 59.486 61.890 64.069 66.403 67.828 69.557 71.412 74.151
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 P	88.648 90.654 92.113 94.099 96.769 100.000 103.263 106.221 108.481 109.754	89.777 91.488 92.736 94.622 97.098 100.000 102.746 105.502 109.031 109.252	97.520 97.429 96.430 96.380 97.867 100.000 101.508 102.789 106.150 103.632	85.824 88.428 90.807 93.692 96.687 100.000 103.411 106.964 110.582 112.221	89.954 90.748 91.118 92.411 95.632 100.000 104.371 106.677 107.355 106.458	89.751 90.553 90.924 92.301 95.541 100.000 104.419 106.718 107.551 106.114	96.219 95.788 95.363 95.355 96.834 100.000 103.534 106.209 107.897	72.298 76.087 79.292 82.174 88.441 100.000 112.922 121.275 125.207 122.759	106.114 103.603 101.494 100.287 99.897 100.000 100.194 100.715 101.455 102.010	77.415 80.994 83.002 86.953 93.296 100.000 106.081 107.513 105.779 100.687
2006: I II IV	102.071 102.980 103.763 104.237	101.803 102.567 103.316 103.298	101.116 101.765 102.329 100.822	102.171 102.998 103.844 104.630	103.139 104.026 104.666 105.653	103.195 104.089 104.713 105.677	102.279 103.112 103.878 104.868	108.823 111.791 113.962 117.111	99.977 100.042 100.285 100.472	104.890 105.940 106.295 107.199
2007:            	105.327 106.026 106.460 107.072	104.250 105.074 105.681 107.005	101.612 102.548 102.627 104.370	105.668 106.433 107.327 108.427	106.375 106.547 106.761 107.024	106.380 106.591 106.803 107.096	105.686 106.104 106.354 106.693	119.716 120.794 121.786 122.804	100.611 100.766 100.712 100.769	107.604 107.307 107.455 107.686
2008: I II IV	107.577 108.061 109.130 109.155	107.974 109.021 110.273 108.855	105.689 106.678 108.451 103.784	109.213 110.296 111.275 111.542	106.586 106.745 107.350 108.738	106.909 107.210 107.866 108.217	106.617 107.161 108.314 109.498	122.976 123.800 125.814 128.238	100.590 101.019 101.797 102.415	107.271 106.838 105.807 103.198
2009: I II IV <sup>p</sup>	109.661 109.656 109.763 109.934	108.449 108.814 109.510 110.235	102.186 102.864 104.216 105.264	111.749 111.954 112.312 112.869	108.245 107.019 105.465 105.102	107.668 106.463 105.265 105.062	109.154 107.993 106.656 106.238	127.092 123.706 120.451 119.786	102.450 102.304 101.802 101.485	101.915 100.554 99.863 100.417

Table B-7. Chain-type price indexes for gross domestic product, 1960-2009—Continued

[Index numbers, 2005=100, except as noted; quarterly data seasonally adjusted]

	Exports ar of go and se	nd imports bods ervices	Go	vernment c and g	onsumptior gross invest	n expenditu ment	res	Final		lomestic lases <sup>1</sup>	Pen	cent chan	ge <sup>2</sup>
Year or quarter					Federal		State	sales of domes- tic		Less	Gross domes-	Gross d	lomestic ases <sup>1</sup>
	Exports	Imports	Total	Total	National defense	Non- defense	and local	product	Total	food and energy	tic product	Total	Less food and energy
1960 1961 1962 1963 1964 1965 1966 1967 1968	27.453 27.871 27.940 27.877 28.107 29.001 29.877 31.022 31.698 32.771	19.941 19.941 19.706 20.088 20.512 20.797 21.281 21.364 21.689 22.254	12.809 13.065 13.398 13.690 14.070 14.444 15.671 16.520 17.517	13.677 13.908 14.202 14.506 14.995 15.379 15.914 16.386 17.287 18.226	13.440 13.633 13.897 14.209 14.620 15.024 15.535 15.994 16.834 17.757	13.946 14.359 14.783 15.037 15.798 16.104 16.708 17.215 18.327 19.284	12.066 12.357 12.743 13.028 13.293 13.662 14.334 15.137 15.945 17.013	18.455 18.663 18.920 19.125 19.424 19.781 20.346 20.978 21.880 22.968	18.220 18.412 18.654 18.871 19.175 19.507 20.054 20.637 21.508 22.563		1.4 1.1 1.4 1.6 1.8 2.8 3.1 4.3 4.9	1.4 1.1 1.3 1.2 1.6 1.7 2.8 2.9 4.2 4.9	
1970 1971 1972 1972 1973 1974 1975 1976 1977 1978	34.027 35.283 36.928 41.784 51.478 56.738 58.600 60.987 64.703 72.490	23.570 25.017 26.770 31.423 44.957 48.699 50.165 54.586 58.440 68.434	18.945 20.421 21.989 23.594 25.977 28.586 30.469 32.583 34.670 37.575	19.699 21.383 23.471 25.080 27.315 30.158 32.302 34.742 36.888 39.727	19.116 20.810 23.209 24.911 27.223 29.880 32.057 34.486 36.908 39.853	21.143 22.746 23.892 25.231 27.245 30.505 32.549 34.993 36.514 39.100	18.411 19.720 20.896 22.495 24.970 27.410 29.114 31.005 33.042 35.976	24.182 25.394 26.494 27.968 30.493 33.389 35.320 37.582 40.232 43.576	23.778 25.000 26.112 27.623 30.459 33.300 35.208 37.586 40.252 43.797		5.3 5.0 4.3 5.5 9.0 9.5 5.7 6.4 7.0 8.3	5.4 5.1 4.4 5.8 10.3 9.3 5.7 6.8 7.1 8.8	
1980	79.843 85.744 86.138 86.478 87.280 84.609 83.342 85.451 89.876 91.373	85.240 89.822 86.794 83.541 82.820 80.100 80.097 84.948 89.011 90.956	41.669 45.768 48.775 50.717 53.319 54.974 55.977 57.541 59.074 60.924	43.900 48.165 51.434 53.218 56.358 57.635 57.938 58.642 59.884 61.504	44.179 48.542 51.953 53.775 57.603 58.696 58.642 59.236 60.326 61.882	42.906 46.917 49.825 51.501 52.779 54.574 55.915 56.953 58.679 60.497	40.002 43.975 46.786 48.857 51.034 53.002 54.577 56.849 58.621 60.654	47.557 52.029 55.233 57.414 59.573 61.414 62.802 64.552 66.807 69.338	48.408 52.864 55.859 57.817 59.854 61.553 62.948 64.923 67.159 69.706	55.358 57.517 59.650 61.521 63.407 65.447 67.839 70.282	9.1 9.4 6.1 3.9 3.8 3.0 2.2 2.8 3.4 3.8	10.5 9.2 5.7 3.5 2.8 2.3 3.1 3.4 3.8	3.9 3.7 3.1 3.1 3.2 3.7 3.6
1990	91.993 93.212 92.833 92.808 93.842 95.997 94.727 93.103 90.972 90.408	93.563 92.783 92.856 92.144 93.009 95.557 93.891 90.627 85.748 86.250	63.405 65.606 67.276 68.949 70.819 72.753 74.488 75.854 76.879 79.337	63.548 66.070 68.101 69.830 71.725 73.717 75.763 77.047 77.931 79.886	63.917 66.222 68.522 69.712 71.438 73.161 75.431 76.517 77.328 79.225	62.568 65.672 67.034 70.002 72.267 74.830 76.406 78.095 79.120 81.188	63.474 65.443 66.856 68.494 70.351 72.252 73.806 75.219 76.320 79.036	72.040 74.592 76.371 78.057 79.707 81.379 82.953 84.449 85.443 86.720	72.540 74.917 76.724 78.339 79.962 81.674 83.150 84.397 84.962 86.304	72.977 75.470 77.450 79.156 80.873 82.647 84.001 85.266 86.093 87.384	3.9 3.5 2.4 2.2 2.1 2.1 1.9 1.8 1.1	4.1 3.3 2.4 2.1 2.1 2.1 1.8 1.5 .7	3.8 3.4 2.6 2.2 2.2 2.2 1.6 1.5 1.0
2000	91.999 91.627 91.253 93.216 96.517 100.000 103.447 107.103 112.389 106.243	89.963 87.762 86.784 89.796 94.144 100.000 104.144 108.017 119.559 107.022	82.513 84.764 87.003 90.650 94.531 100.000 104.842 109.552 114.502 114.298	82.524 84.201 87.318 91.024 95.335 100.000 104.107 107.754 110.938 111.516	81.821 83.484 86.624 90.659 94.895 100.000 104.421 108.286 111.913 112.089	83.907 85.612 88.689 91.774 96.234 100.000 103.468 106.672 108.935 110.360	82.482 85.019 86.810 90.425 94.062 100.000 105.276 110.615 116.642 115.923	88.623 90.631 92.089 94.089 96.759 100.000 103.266 106.226 108.507 109.666	88.463 90.123 91.422 93.550 96.400 100.000 103.380 106.408 109.765 109.823	89.163 90.769 92.300 94.177 96.762 100.000 103.157 105.984 108.689 109.508	2.2 2.3 1.6 2.2 2.8 3.3 3.3 2.9 2.1 1.2	2.5 1.9 1.4 2.3 3.0 3.7 3.4 2.9 3.2	2.0 1.8 1.7 2.0 2.7 3.3 3.2 2.7 2.6 .8
2006: I II III IV	101.828 103.125 104.395 104.438	103.243 104.322 105.121 103.889	103.232 104.644 105.437 106.055	103.101 104.187 104.502 104.637	103.336 104.499 104.883 104.965	102.622 103.551 103.728 103.972	103.307 104.916 105.990 106.892	102.075 102.985 103.767 104.237	102.275 103.173 103.910 104.162	102.022 102.913 103.538 104.153	3.0 3.6 3.1 1.8	2.8 3.6 2.9 1.0	3.1 3.5 2.5 2.4
2007:            	105.355 106.516 107.396 109.144	104.711 106.332 107.937 113.088	107.888 109.129 109.854 111.336	106.808 107.737 107.896 108.577	107.089 108.172 108.493 109.389	106.243 106.858 106.678 106.908	108.527 109.949 111.009 112.975	105.325 106.032 106.465 107.080	105.229 106.024 106.592 107.786	105.073 105.635 106.187 107.040	4.2 2.7 1.6 2.3	4.2 3.1 2.2 4.6	3.6 2.2 2.1 3.3
2008:            	111.156 113.890 115.638 108.871	117.234 123.069 125.203 112.730	113.038 114.772 115.963 114.233	110.077 111.265 111.784 110.628	110.857 112.402 113.059 111.334	108.469 108.922 109.149 109.198	114.803 116.877 118.493 116.396	107.623 108.127 109.202 109.078	108.678 109.722 110.871 109.790	107.743 108.544 109.317 109.151	1.9 1.8 4.0	3.4 3.9 4.3 -3.8	2.7 3.0 2.9 6
2009:         	105.265 105.284 106.473 107.952	103.746 104.821 107.688 111.830	113.924 114.051 114.312 114.905	111.084 111.214 111.601 112.164	111.584 111.664 112.195 112.914	110.085 110.320 110.401 110.635	115.587 115.713 115.889 116.501	109.566 109.550 109.681 109.868	109.395 109.533 109.895 110.470	109.215 109.439 109.521 109.856	1.9 .0 .4 .6	-1.4 .5 1.3 2.1	.2 .8 .3 1.2

 $<sup>^{\</sup>rm 1}$  Gross domestic product (GDP) less exports of goods and services plus imports of goods and services.  $^{\rm 2}$  Quarterly percent changes are at annual rates.

Table B-8. Gross domestic product by major type of product, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

							Goods					
		Final	Change		Total		Durable	anode	Nondural	ble goods		
Year or quarter	Gross domestic product	sales of domes- tic product	in private inven- tories	Total	Final sales	Change in private inven- tories	Final sales	Change in private inven- tories 1	Final sales	Change in private inven- tories 1	Serv- ices <sup>2</sup>	Struc- tures
1960 1961 1962 1963 1964 1965 1966 1967 1968	526.4 544.8 585.7 617.8 663.6 719.1 787.7 832.4 909.8 984.4	523.2 541.8 579.6 612.1 658.8 709.9 774.1 822.6 900.8 975.3	3.2 3.0 6.1 5.6 4.8 9.2 13.6 9.9 9.1 9.2	227.5 230.6 247.4 258.5 277.8 304.3 337.1 345.4 370.8 397.6	224.3 227.6 241.3 252.9 273.0 295.1 323.5 335.5 361.7 388.4	3.2 3.0 6.1 5.6 4.8 9.2 13.6 9.9 9.1	92.5 92.6 102.0 108.6 119.3 131.6 145.4 150.0 162.8 175.7	1.7 1 3.4 2.6 3.8 6.2 10.0 4.8 4.5 6.0	131.7 135.0 139.3 144.3 153.7 163.5 178.0 185.5 198.9 212.7	1.6 3.0 2.7 3.0 1.0 3.0 3.6 5.0 4.5 3.2	237.0 250.6 270.4 286.6 307.4 330.1 362.6 397.5 439.1 478.6	61.9 63.6 67.8 72.7 78.4 84.7 88.0 89.6 100.0 108.3
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979	1,038.3 1,126.8 1,237.9 1,382.3 1,499.5 1,637.7 1,824.6 2,030.1 2,293.8 2,562.2	1,036.3 1,118.6 1,228.8 1,366.4 1,485.5 1,644.0 1,807.5 2,007.8 2,268.0 2,544.2	2.0 8.3 9.1 15.9 14.0 -6.3 17.1 22.3 25.8 18.0	408.7 432.6 472.0 547.1 588.0 628.6 706.6 773.5 872.6 977.2	406.7 424.4 462.9 531.2 574.0 634.8 689.5 751.2 846.8 959.2	2.0 8.3 9.1 15.9 14.0 -6.3 17.1 22.3 25.8 18.0	178.6 186.7 208.4 243.6 262.4 293.2 330.9 374.6 424.9 483.9	-2 2.9 6.4 13.0 10.9 -7.5 10.8 9.5 18.2 12.8	228.2 237.7 254.5 287.6 311.7 341.6 358.6 376.6 422.0 475.3	2.2 5.3 2.7 2.9 3.1 1.2 6.3 12.8 7.6 5.2	519.9 565.8 619.0 672.2 745.8 842.4 926.8 1,029.9 1,147.2 1,271.7	109.7 128.4 146.9 162.9 165.6 166.7 191.2 226.8 273.9 313.3
1980 1981 1982 1983 1984 1985 1986 1987 1988	2,788.1 3,126.8 3,253.2 3,534.6 3,930.9 4,217.5 4,460.1 4,736.4 5,100.4 5,482.1	2,794.5 3,097.0 3,268.1 3,540.4 3,865.5 4,195.6 4,453.5 4,709.2 5,081.9 5,454.5	-6.3 29.8 -14.9 -5.8 65.4 21.8 6.6 27.1 18.5 27.7	1,035.2 1,167.3 1,148.8 1,226.9 1,402.2 1,452.8 1,491.2 1,570.7 1,703.7	1,041.5 1,137.5 1,163.7 1,232.6 1,336.8 1,431.0 1,484.7 1,543.6 1,685.2 1,824.2	-6.3 29.8 -14.9 -5.8 65.4 21.8 6.6 27.1 18.5 27.7	512.3 554.8 552.5 592.3 665.9 727.9 758.3 785.3 863.3 939.7	-2.3 7.3 -16.0 2.5 41.4 4.4 -1.9 22.9 22.7 20.0	529.2 582.6 611.2 640.3 670.9 703.1 726.4 758.3 821.9 884.5	-4.0 22.5 1.1 -8.2 24.0 17.4 8.4 4.2 -4.3 7.7	1,431.6 1,606.9 1,759.9 1,939.1 2,102.9 2,305.9 2,488.7 2,668.0 2,881.7 3,101.2	321.3 352.6 344.5 368.7 425.8 458.7 480.1 497.6 515.0 529.0
1990	5,800.5 5,992.1 6,342.3 6,667.4 7,085.2 7,414.7 7,838.5 8,332.4 8,793.5 9,353.5	5,786.0 5,992.5 6,326.0 6,646.5 7,021.4 7,383.5 7,807.7 8,261.4 8,729.8 9,292.7	14.5 4 16.3 20.8 63.8 31.2 30.8 71.0 63.7 60.8	1,923.1 1,943.5 2,031.5 2,124.2 2,290.7 2,379.5 2,516.3 2,701.2 2,819.2 2,990.1	1,908.5 1,943.9 2,015.1 2,103.4 2,226.9 2,348.3 2,485.5 2,630.2 2,755.5 2,929.3	14.5 4 16.3 20.8 63.8 31.2 30.8 71.0 63.7 60.8	973.2 967.6 1,010.7 1,072.9 1,149.8 1,225.9 1,321.0 1,430.7 1,524.2 1,633.8	7.7 -13.6 -3.0 17.1 35.7 33.6 19.1 40.0 39.3 37.4	935.3 976.3 1,004.4 1,030.4 1,077.1 1,122.4 1,164.5 1,199.5 1,231.3 1,295.5	6.8 13.2 19.3 3.7 28.1 -2.4 11.7 31.0 24.4 23.4	3,343.9 3,548.6 3,788.1 3,985.1 4,187.2 4,396.7 4,625.5 4,882.5 5,159.7 5,485.1	533.5 499.9 522.7 558.1 607.3 638.5 696.7 748.6 814.5 878.2
2000	9,951.5 10,286.2 10,642.3 11,142.1 11,867.8 12,638.4 13,398.9 14,077.6 14,441.4 14,258.7	9,896.9 10,324.5 10,630.3 11,125.8 11,802.8 12,588.4 13,339.0 14,058.3 14,476.2 14,383.7	54.5 -38.3 12.0 16.4 64.9 50.0 60.0 19.4 -34.8 -125.0	3,124.5 3,077.6 3,101.2 3,170.1 3,333.9 3,472.9 3,660.7 3,814.1 3,783.8 3,696.8	3,070.0 3,115.9 3,089.1 3,153.7 3,269.0 3,422.9 3,600.7 3,794.7 3,818.6 3,821.8	54.5 -38.3 12.0 16.4 64.9 50.0 60.0 19.4 -34.8 -125.0	1,734.4 1,731.5 1,678.9 1,694.2 1,748.0 1,855.9 1,951.5 2,040.1 2,032.0 1,906.0	35.6 -44.4 17.7 13.0 37.3 35.2 25.9 7.6 10.3 -94.9	1,335.6 1,384.4 1,410.3 1,459.5 1,521.1 1,567.0 1,649.3 1,754.6 1,786.6 1,915.9	19.0 6.2 -5.6 3.3 27.6 14.7 34.0 11.8 -45.1 -30.1	5,878.0 6,208.7 6,535.5 6,891.7 7,319.3 7,802.1 8,285.5 8,810.8 9,265.4 9,397.3	949.0 999.9 1,005.7 1,080.4 1,214.5 1,363.4 1,452.7 1,452.8 1,392.2 1,164.6
2006: I II III IV	13,183.5 13,347.8 13,452.9 13,611.5	13,117.5 13,275.4 13,383.8 13,579.2	66.0 72.4 69.1 32.3	3,615.0 3,646.9 3,667.4 3,713.5	3,549.0 3,574.5 3,598.3 3,681.2	66.0 72.4 69.1 32.3	1,938.9 1,943.2 1,945.8 1,977.9	20.9 33.7 44.1 5.1	1,610.1 1,631.3 1,652.5 1,703.3	45.1 38.7 25.0 27.3	8,114.2 8,229.7 8,335.7 8,462.4	1,454.3 1,471.3 1,449.7 1,435.6
2007: I II IV	13,795.6 13,997.2 14,179.9 14,337.9	13,782.5 13,973.7 14,148.8 14,328.0	13.1 23.5 31.0 9.8	3,726.7 3,796.5 3,844.8 3,888.3	3,713.6 3,773.1 3,813.7 3,878.4	13.1 23.5 31.0 9.8	1,986.4 2,032.5 2,047.4 2,094.2	11.2 -9.2 11.0 17.3	1,727.3 1,740.5 1,766.3 1,784.2	1.9 32.6 20.1 -7.5	8,620.5 8,738.5 8,872.1 9,012.2	1,448.4 1,462.2 1,463.0 1,437.4
2008: I II IV	14,373.9 14,497.8 14,546.7 14,347.3	14,382.1 14,547.1 14,583.7 14,391.8	-8.2 -49.3 -37.0 -44.5	3,842.5 3,825.2 3,806.1 3,661.4	3,850.7 3,874.6 3,843.0 3,705.9	-8.2 -49.3 -37.0 -44.5	2,076.7 2,073.1 2,042.3 1,935.7	16.5 -22.0 35.9 10.8	1,774.0 1,801.4 1,800.7 1,770.2	-24.7 -27.3 -72.9 -55.3	9,131.8 9,263.3 9,340.8 9,325.7	1,399.5 1,409.3 1,399.8 1,360.2
2009: I II IV P	14,178.0 14,151.2 14,242.1 14,463.4	14,305.3 14,327.4 14,398.7 14,503.4	-127.4 -176.2 -156.5 -40.0	3,649.3 3,625.7 3,679.9 3,832.4	3,776.7 3,801.9 3,836.4 3,872.4	-127.4 -176.2 -156.5 -40.0	1,905.2 1,898.8 1,911.9 1,908.0	-122.7 -129.0 -100.2 -27.7	1,871.5 1,903.1 1,924.6 1,964.4	-4.6 -47.2 -56.3 -12.3	9,308.8 9,358.4 9,417.0 9,504.9	1,219.9 1,167.0 1,145.3 1,126.1

Estimates for durable and nondurable goods for 1996 and earlier periods are based on the Standard Industrial Classification (SIC); later estimates are based on the North American Industry Classification System (NAICS).
 Includes government consumption expenditures, which are for services (such as education and national defense) produced by government. In current dollars, these services are valued at their cost of production.

TABLE B-9. Real gross domestic product by major type of product, 1960-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

				Goods								
		Final	Change		Total		Durable	e goods	Nondura	ble goods		
Year or quarter	Gross domestic product	sales of domes- tic product	in private inven- tories	Total	Final sales	Change in private inven- tories	Final sales	Change in private inven- tories 1	Final sales	Change in private inven- tories <sup>1</sup>	Serv- ices <sup>2</sup>	Struc- tures
1960 1961 1962 1963 1964 1965 1966 1967 1968	2,830.9 2,896.9 3,072.4 3,206.7 3,392.3 3,610.1 3,845.3 3,942.5 4,133.4 4,261.8	2,836.6 2,904.6 3,064.9 3,202.6 3,393.7 3,590.7 3,806.6 3,923.3 4,119.4 4,248.6	11.8 10.6 21.9 20.3 17.3 32.9 47.1 33.9 30.8 30.3	603.2 608.2 649.3 675.1 720.3 780.7 848.6 850.9 884.9 915.4							1,835.7 1,902.6 2,007.2 2,090.3 2,189.4 2,299.1 2,441.0 2,576.9 2,712.7 2,800.8	509.9 524.1 554.2 591.7 631.5 663.1 663.9 654.2 694.5 703.3
1970	4,269.9 4,413.3 4,647.7 4,917.0 4,889.9 4,879.5 5,141.3 5,377.7 5,677.6 5,855.0	4,287.9 4,407.4 4,640.6 4,888.2 4,874.1 4,926.3 5,120.2 5,344.9 5,639.7 5,841.2	5.6 25.0 25.7 39.0 29.1 -12.8 34.3 43.1 45.6 28.0	907.7 934.7 998.5 1,104.7 1,094.1 1,066.8 1,150.5 1,205.8 1,286.8 1,340.0							2,858.2 2,926.8 3,034.7 3,125.5 3,194.6 3,309.1 3,400.2 3,517.0 3,651.5 3,740.1	673.0 735.5 790.2 807.1 723.4 657.6 719.2 787.2 862.8 887.4
1980 1981 1982 1983 1983 1985 1985 1986 1987 1988	5,839.0 5,987.2 5,870.9 6,136.2 6,577.1 6,849.3 7,086.5 7,313.3 7,613.9 7,885.9	5,878.7 5,959.5 5,923.3 6,172.9 6,495.6 6,838.9 7,098.7 7,296.2 7,607.8 7,867.5	-9.3 39.0 -19.7 -7.7 78.3 25.4 8.5 33.2 21.9 30.6	1,328.3 1,388.2 1,316.8 1,373.7 1,544.0 1,581.0 1,627.1 1,692.7 1,798.0 1,900.2							3,811.2 3,887.4 3,956.9 4,120.1 4,234.1 4,448.8 4,635.2 4,785.3 4,961.3 5,114.8	823.0 811.9 742.6 796.3 903.9 951.0 965.1 969.3 967.6
1990 1991 1992 1993 1994 1995 1996 1997 1998	8,033.9 8,015.1 8,287.1 8,523.4 8,870.7 9,093.7 9,433.9 9,854.3 10,283.5 10,779.8	8,032.7 8,034.8 8,284.3 8,515.3 8,809.2 9,073.2 9,412.5 9,782.6 10,217.1 10,715.7	16.6 -1.4 17.9 22.3 69.3 32.1 31.2 77.4 71.6 68.5	1,920.1 1,887.6 1,964.7 2,040.3 2,183.8 2,264.0 2,387.7 2,573.9 2,723.0 2,914.0	2,241.1 2,363.9 2,509.8 2,663.0 2,855.8	32.1 31.2 77.4 71.6 68.5	1,023.0 1,110.9 1,222.7 1,341.5 1,476.4	31.4 17.9 40.2 40.6 39.5	1,260.0 1,286.7 1,309.9 1,334.3 1,385.0	-3.3 12.5 36.1 29.5 27.7	5,269.3 5,363.0 5,521.7 5,647.9 5,781.2 5,902.5 6,045.3 6,208.3 6,421.7 6,663.6	941.9 869.1 902.4 930.5 978.4 988.9 1,053.1 1,097.8 1,155.1 1,202.2
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 p	11,226.0 11,347.2 11,553.0 11,840.7 12,263.8 12,638.4 12,976.2 13,254.1 13,312.2 12,988.7	11,167.5 11,391.7 11,543.5 11,824.8 12,198.2 12,588.4 12,917.1 13,234.3 13,341.2 13,115.2	60.2 -41.8 12.8 17.3 66.3 50.0 59.4 19.5 -25.9 -111.7	3,056.3 3,006.9 3,059.2 3,164.0 3,326.2 3,472.9 3,652.7 3,789.7 3,805.1 3,615.6	3,002.8 3,043.6 3,047.4 3,146.1 3,260.9 3,422.9 3,593.5 3,771.6 3,839.5 3,755.3	60.2 -41.8 12.8 17.3 66.3 50.0 59.4 19.5 -25.9 -111.7	1,590.5 1,614.7 1,596.7 1,656.3 1,740.4 1,855.9 1,964.4 2,080.7 2,106.7 1,981.3	37.7 -46.4 18.1 13.5 38.1 35.2 25.2 7.6 9.4 -88.9	1,411.8 1,428.2 1,451.9 1,490.5 1,520.6 1,567.0 1,629.2 1,691.7 1,732.9	21.4 7.3 -6.4 3.6 28.1 14.7 34.1 11.8 -33.7 -24.7	6,918.7 7,095.4 7,275.6 7,416.0 7,613.1 7,802.1 7,985.0 8,192.7 8,314.8 8,354.0	1,245.3 1,254.1 1,223.2 1,263.6 1,325.6 1,363.4 1,341.1 1,281.4 1,205.4
2006: I II IV	12,915.9 12,962.5 12,965.9 13,060.7	12,851.3 12,891.0 12,898.3 13,027.8	65.8 72.5 67.5 31.8	3,624.5 3,640.6 3,640.9 3,704.9	3,559.5 3,568.5 3,573.0 3,672.9	65.8 72.5 67.5 31.8	1,943.8 1,953.8 1,962.4 1,997.6	20.6 32.9 42.4 5.2	1,615.9 1,614.9 1,611.0 1,675.0	45.1 39.7 25.1 26.6	7,918.5 7,957.8 7,996.6 8,067.2	1,374.0 1,365.4 1,330.7 1,294.4
2007:            	13,099.9 13,204.0 13,321.1 13,391.2	13,086.4 13,179.6 13,290.3 13,381.1	14.5 23.3 29.8 10.3	3,697.4 3,753.3 3,818.9 3,889.1	3,685.8 3,730.3 3,789.2 3,881.3	14.5 23.3 29.8 10.3	2,009.7 2,063.3 2,097.1 2,152.9	11.1 -8.2 10.7 16.7	1,675.8 1,668.1 1,693.1 1,729.8	3.2 30.8 18.8 -5.6	8,120.4 8,163.1 8,224.8 8,262.3	1,287.3 1,294.5 1,287.6 1,256.3
2008: I II IV	13,366.9 13,415.3 13,324.6 13,141.9	13,363.5 13,453.5 13,354.3 13,193.5	.6 -37.1 -29.7 -37.4	3,871.4 3,885.6 3,815.5 3,648.1	3,870.6 3,930.0 3,850.5 3,706.7	.6 -37.1 -29.7 -37.4	2,141.2 2,156.8 2,121.2 2,007.5	15.2 -19.6 32.8 9.2	1,730.5 1,773.4 1,730.1 1,697.5	-13.7 -18.4 -57.8 -45.1	8,292.1 8,322.9 8,315.1 8,329.3	1,221.2 1,225.3 1,208.0 1,167.0
2009: I II IV P	12,925.4 12,901.5 12,973.0 13,155.0	13,055.8 13,077.8 13,127.2 13,200.2	-113.9 -160.2 -139.2 -33.5	3,566.4 3,537.3 3,592.1 3,766.7	3,710.2 3,730.3 3,761.5 3,819.2	-113.9 -160.2 -139.2 -33.5	1,973.9 1,965.9 1,993.5 1,991.8	-115.3 -121.8 -93.1 -25.4	1,731.3 1,757.5 1,762.2 1,817.8	-1.7 -40.8 -47.6 -8.6	8,311.4 8,341.8 8,363.7 8,399.0	1,051.8 1,025.2 1,023.1 1,006.8

Estimates for durable and nondurable goods for 1996 and earlier periods are based on the Standard Industrial Classification (SIC); later estimates are based on the North American Industry Classification System (NAICS).

 Includes government consumption expenditures, which are for services (such as education and national defense) produced by government. In current dollars, these services are valued at their cost of production.

#### Table B-10. Gross value added by sector, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Business 1			olds and inst	itutions		eral governme	ont 3	
Year or quarter	Gross domestic product	Total	Nonfarm <sup>1</sup>	Farm	Total	House- holds	Nonprofit institu- tions serving house- holds <sup>2</sup>	Total	Federal	State and local	Adden- dum: Gross housing value added
1960	544.8 585.7 617.8 663.6 719.1 787.7 832.4 909.8 984.4	419.9 431.4 463.9 488.0 524.9 570.7 624.3 653.6 713.5 769.1	401.7 413.1 445.5 469.5 507.5 550.7 603.5 633.5 693.0 746.3	18.2 18.3 18.4 18.5 17.3 19.9 20.8 20.1 20.5 22.8	44.5 47.3 51.0 54.3 57.7 61.8 66.6 71.8 77.5 85.4	32.6 34.6 37.0 39.1 41.2 43.6 46.2 49.1 51.9 56.0	12.0 12.8 14.0 15.2 16.5 18.2 20.4 22.7 25.6 29.4	62.0 66.0 70.7 75.5 81.1 86.6 96.8 107.0 118.8 130.0	33.0 34.4 36.5 38.4 40.7 42.4 47.2 51.5 56.3 59.9	28.9 31.6 34.2 37.1 40.4 44.2 49.6 55.5 62.5 70.0	39.9 42.8 46.0 48.9 51.6 54.9 58.2 62.1 65.9 71.3
1970 1971 1972 1973 1974 1975 1976 1977 1978	1,126.8 1,237.9 1,382.3 1,499.5 1,637.7 1,824.6 2,030.1 2,293.8 2,562.2	802.2 868.3 957.1 1,077.4 1,164.5 1,265.8 1,420.7 1,590.0 1,809.4 2,028.5	778.5 842.9 927.5 1,030.6 1,120.3 1,220.1 1,377.7 1,546.5 1,758.7	23.7 25.4 29.7 46.8 44.2 45.6 43.0 43.5 50.7 60.1	92.6 102.2 111.4 121.7 133.6 147.5 160.5 175.5 196.9 220.8	59.8 65.5 70.8 76.5 83.0 90.8 98.7 107.9 121.3 136.0	32.8 36.7 40.5 45.2 50.6 56.7 61.8 67.6 75.6 84.8	143.5 156.4 169.4 183.2 201.3 224.5 243.5 264.6 287.5 313.0	64.0 67.7 71.5 73.9 79.6 87.3 93.8 102.0 109.7 117.6	79.5 88.6 97.9 109.3 121.8 137.2 149.7 162.6 177.8 195.4	76.7 83.9 91.1 98.3 106.8 117.2 126.6 140.5 155.5
1980 1981 1982 1983 1984 1985 1986 1987 1988	3,126.8 3,253.2 3,534.6 3,930.9 4,217.5 4,460.1 4,736.4 5,100.4 5,482.1	2,186.1 2,454.0 2,514.9 2,741.1 3,065.5 3,283.9 3,461.5 3,662.0 3,940.2 4,235.7	2,134.7 2,389.0 2,454.5 2,696.2 3,001.3 3,220.5 3,402.1 3,600.5 3,879.4 4,162.0	51.4 65.0 60.4 44.9 64.2 63.4 59.5 61.5 60.7 73.8	253.5 287.5 319.3 348.2 380.3 410.1 442.3 482.8 529.7 574.2	156.5 177.8 196.7 212.5 231.0 250.3 268.0 288.0 313.1 337.2	97.0 109.7 122.7 135.6 149.3 159.8 174.3 194.8 216.6 237.0	348.5 385.3 419.0 445.4 485.1 523.4 556.3 591.5 630.6 672.2	131.2 147.4 161.2 171.2 192.1 205.0 212.6 223.3 234.8 246.4	217.3 237.9 257.7 274.1 293.1 318.4 343.7 368.2 395.8 425.8	199.8 228.8 255.7 277.7 301.3 333.1 359.7 385.5 415.3 443.4
1990 1991 1992 1993 1994 1995 1996 1997 1998	5,992.1 6,342.3 6,667.4 7,085.2 7,414.7 7,838.5 8,332.4 8,793.5 9,353.5	4,453.9 4,558.6 4,829.2 5,084.1 5,425.2 5,677.8 6,030.2 6,442.8 6,810.8 7,249.0	4,376.6 4,488.0 4,748.9 5,012.7 5,341.3 5,608.7 5,936.9 6,354.9 6,731.6 7,177.8	77.3 70.6 80.4 71.4 83.9 69.1 93.3 87.9 79.2 71.2	624.0 665.9 711.1 752.1 800.0 852.1 897.0 949.2 1,010.1 1,082.9	363.3 383.7 405.3 428.3 461.3 492.2 519.8 550.9 583.9 628.4	260.6 282.2 305.9 323.8 338.7 359.9 377.2 398.3 426.3 454.5	722.7 767.6 801.9 831.2 859.9 884.8 911.3 940.3 972.5 1,021.6	258.8 274.8 282.0 285.2 285.2 283.6 287.6 290.0 292.2 300.4	463.9 492.8 519.9 546.0 574.7 601.2 623.7 650.3 680.3 721.2	477.8 508.1 538.6 562.9 602.6 640.7 671.3 708.6 745.3 798.3
2000	10,286.2 10,642.3 11,142.1 11,867.8 12,638.4 13,398.9	7,715.5 7,913.6 8,132.8 8,502.8 9,084.6 9,695.5 10,284.1 10,789.0 10,953.1 10,668.7	7,641.9 7,837.4 8,060.5 8,410.3 8,966.4 9,593.5 10,191.1 10,672.8 10,821.0 10,562.2	73.6 76.2 72.3 92.4 118.3 102.0 93.1 116.2 132.1 106.5	1,157.2 1,232.9 1,298.0 1,347.2 1,423.8 1,506.4 1,602.9 1,686.9 1,799.9	673.5 719.5 746.0 762.7 806.0 864.4 924.8 973.7 1,048.7 1,062.2	483.7 513.4 552.1 584.5 617.7 642.0 678.1 713.1 751.2 767.7	1,078.8 1,139.6 1,211.4 1,292.2 1,359.3 1,436.5 1,512.0 1,601.8 1,688.4 1,760.0	315.1 324.9 351.8 382.9 412.0 438.7 460.6 485.7 515.2 558.7	763.7 814.7 859.6 909.3 947.3 997.7 1,051.3 1,116.0 1,173.2 1,201.3	849.9 904.4 932.5 938.2 988.7 1,054.0 1,130.8 1,205.4 1,306.5 1,331.3
2006: I II III IV	13,347.8	10,129.8 10,246.9 10,311.9 10,447.9	10,043.0 10,156.4 10,218.2 10,346.6	86.7 90.6 93.6 101.3	1,570.4 1,599.3 1,619.6 1,622.0	906.0 924.3 938.4 930.4	664.4 675.0 681.2 691.6	1,483.2 1,501.6 1,521.4 1,541.6	455.8 459.7 462.4 464.7	1,027.5 1,041.9 1,059.0 1,076.9	1,104.9 1,127.8 1,146.7 1,143.7
2007:                  V	13,997.2 14,179.9 14,337.9	10,572.3 10,737.4 10,872.9 10,973.3	10,462.3 10,626.8 10,758.4 10,843.9	110.0 110.6 114.5 129.5	1,648.7 1,666.4 1,697.6 1,734.6	947.4 958.3 981.7 1,007.6	701.3 708.1 716.0 727.0	1,574.5 1,593.4 1,609.3 1,629.9	480.7 484.0 487.3 490.9	1,093.8 1,109.3 1,122.0 1,139.0	1,166.8 1,185.6 1,217.5 1,251.8
2008: I II III IV	14,373.9 14,497.8 14,546.7 14,347.3	10,952.7 11,022.1 11,034.7 10,802.9	10,809.7 10,889.6 10,901.6 10,683.3	143.1 132.6 133.0 119.6	1,761.5 1,796.2 1,812.4 1,829.5	1,025.0 1,050.6 1,057.1 1,062.0	736.5 745.5 755.3 767.5	1,659.7 1,679.5 1,699.6 1,715.0	505.3 511.8 518.5 525.2	1,154.4 1,167.7 1,181.1 1,189.7	1,274.6 1,306.2 1,318.3 1,326.9
2009:                  <i>P</i>	14,151.2	10,614.2 10,578.5 10,641.0 10,840.9	10,510.4 10,473.0 10,540.6 10,724.7	103.8 105.5 100.4 116.2	1,823.9 1,814.7 1,836.5 1,844.8	1,063.4 1,054.5 1,065.6 1,065.4	760.5 760.1 770.9 779.4	1,739.8 1,758.0 1,764.7 1,777.7	543.8 554.3 563.6 573.3	1,196.0 1,203.8 1,201.1 1,204.4	1,330.0 1,322.9 1,335.6 1,336.8

Gross domestic business value added equals gross domestic product excluding gross value added of households and institutions and of general government. Nonfarm value added equals gross domestic business value added excluding gross farm value added.

2 Equals compensation of employees of nonprofit institutions, the rental value of nonresidential fixed assets owned and used by nonprofit institutions serving households, and rental income of persons for tenant-occupied housing owned by nonprofit institutions.

3 Equals compensation of general government employees plus general government consumption of fixed capital.

Source: Department of Commerce (Bureau of Economic Analysis).

#### TABLE B-11. Real gross value added by sector, 1960-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

		Business <sup>1</sup>		Househ	olds and inst	titutions	Gene	eral governm	ent <sup>3</sup>		
Year or quarter	Gross domestic product	Total	Nonfarm <sup>1</sup>	Farm	Total	House- holds	Nonprofit institu- tions serving house- holds <sup>2</sup>	Total	Federal	State and local	Adden- dum: Gross housing value added
1960 1961 1962 1963 1964 1965 1966 1967 1968	2,830.9 2,896.9 3,072.4 3,206.7 3,392.3 3,610.1 3,845.3 3,942.5 4,133.4 4,261.8	1,928.1 1,965.8 2,092.6 2,189.2 2,328.0 2,492.3 2,661.0 2,712.0 2,846.8 2,934.0	1,889.6 1,927.3 2,058.9 2,155.2 2,299.7 2,462.6 2,638.6 2,684.1 2,824.8 2,910.9	25.1 25.4 24.9 25.7 24.9 26.5 25.5 27.6 26.6 27.5	335.6 349.6 368.9 384.0 399.9 419.7 438.9 457.1 480.1 501.2	197.3 206.5 217.9 226.9 236.0 246.9 256.8 267.1 274.6 285.9	135.2 139.2 146.6 152.6 159.4 168.6 178.5 186.6 204.9 214.9	670.5 694.2 721.3 742.8 768.4 794.2 843.9 888.7 923.6 947.2	369.8 377.6 393.2 396.7 400.7 403.4 429.9 457.9 465.7	310.5 326.5 338.5 356.1 377.5 400.5 424.2 442.1 468.6 490.0	237.2 250.5 265.9 278.9 291.6 307.1 320.9 335.6 348.3 364.6
1970 1971 1972 1973 1974 1975 1976 1977 1978	4,269.9 4,413.3 4,647.7 4,917.0 4,889.9 4,879.5 5,141.3 5,377.7 5,677.6 5,855.0	2,933.3 3,046.0 3,242.1 3,469.4 3,417.5 3,385.6 3,609.2 3,810.1 4,050.1 4,184.6	2,907.7 3,018.2 3,218.8 3,454.8 3,404.1 3,348.6 3,583.4 4,032.5 4,159.7	28.3 29.8 29.5 28.8 34.3 32.7 34.5 33.3 36.3	510.2 531.7 554.8 574.6 597.7 617.9 628.2 637.5 666.4 695.3	292.6 305.9 319.1 330.6 345.0 354.2 360.9 365.0 387.4 405.0	216.7 224.5 234.4 242.7 251.0 262.5 265.8 271.3 276.7 287.8	950.8 952.4 950.6 954.9 974.4 990.1 998.7 1,009.2 1,028.5 1,039.5	447.1 426.5 405.8 390.7 389.4 387.3 387.9 389.0 393.9 393.5	511.7 532.5 550.9 570.2 590.9 608.9 616.9 626.4 641.0 652.4	376.6 393.6 412.5 427.8 448.5 462.2 469.3 481.2 503.2 523.0
1980 1981 1982 1983 1984 1985 1986 1987 1988	5,839.0 5,987.2 5,870.9 6,136.2 6,577.1 6,849.3 7,086.5 7,313.3 7,613.9 7,885.9	4,137.4 4,252.5 4,123.7 4,345.8 4,723.2 4,942.5 5,126.9 5,295.7 5,522.7 5,727.3	4,114.9 4,202.5 4,066.9 4,328.5 4,684.5 4,886.4 5,076.1 5,245.2 5,484.5 5,678.1	35.2 46.5 48.8 31.9 43.3 52.9 50.8 51.3 45.6 52.3	730.9 754.1 778.9 801.0 826.8 841.2 863.4 895.8 937.2 974.8	430.6 444.1 452.1 460.5 476.4 487.4 493.7 506.8 525.7 542.0	297.1 306.8 324.3 338.5 348.3 351.2 368.0 411.1 432.9	1,054.4 1,060.2 1,071.0 1,077.9 1,091.3 1,122.5 1,150.1 1,175.3 1,205.8 1,234.6	399.7 405.9 412.5 422.0 431.6 443.9 451.8 463.6 469.3 475.1	661.2 660.9 665.2 662.5 666.4 685.6 705.4 719.0 743.6 766.4	555.0 576.7 592.3 605.4 624.6 649.1 661.1 676.8 696.4 712.2
1990 1991 1992 1993 1994 1995 1996 1997 1998	8,033.9 8,015.1 8,287.1 8,523.4 8,870.7 9,093.7 9,433.9 9,854.3 10,283.5 10,779.8	5,815.3 5,764.3 5,991.8 6,185.0 6,488.2 6,670.8 6,974.6 7,335.7 7,702.4 8,132.8	5,759.9 5,707.0 5,921.3 6,128.2 6,414.2 6,617.8 6,909.4 7,261.4 7,633.5 8,060.6	56.0 56.9 66.2 57.8 70.5 56.4 65.3 72.5 69.4 72.8	1,009.6 1,038.5 1,071.4 1,106.9 1,140.0 1,175.5 1,199.8 1,240.5 1,280.2 1,325.5	555.7 572.0 589.0 603.5 631.9 651.3 665.4 687.6 703.7 740.3	454.9 467.4 483.5 504.9 508.7 524.8 535.0 553.5 577.8 585.3	1,266.2 1,279.4 1,283.7 1,286.5 1,286.8 1,287.7 1,289.8 1,299.6 1,314.3 1,326.3	483.8 486.7 476.5 467.4 452.2 435.1 423.2 415.2 410.4 407.1	789.2 799.4 813.0 824.2 838.5 855.1 868.4 885.6 904.6 919.5	730.2 754.6 776.7 789.1 821.7 846.9 860.4 885.6 900.9 942.3
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 P	11,226.0 11,347.2 11,553.0 11,840.7 12,263.8 12,638.4 12,976.2 13,254.1 13,312.2 12,988.7	8,500.9 8,569.1 8,736.6 9,005.9 9,379.9 9,695.5 9,991.7 10,215.3 10,214.8 9,855.8	8,417.8 8,491.9 8,655.9 8,914.8 9,282.0 9,593.5 9,892.3 10,123.7 10,109.2 9,741.7	83.5 77.7 81.2 91.6 97.9 102.0 99.1 91.6 103.4 111.4	1,376.2 1,407.0 1,417.3 1,417.8 1,457.4 1,506.4 1,539.8 1,573.8 1,598.6 1,600.7	774.1 793.1 789.9 787.1 821.7 864.4 898.0 919.5 931.3 924.3	601.8 613.4 627.7 631.1 635.9 642.0 654.5 667.4 676.6	1,349.4 1,373.7 1,401.4 1,418.2 1,426.8 1,436.5 1,445.0 1,465.5 1,497.5	410.5 412.1 420.2 431.5 435.8 438.7 438.4 441.8 459.2 487.3	939.0 961.3 980.9 986.7 991.0 997.7 1,006.5 1,023.7 1,038.3 1,038.2	977.8 997.8 988.5 969.3 1,008.4 1,058.6 1,136.8 1,154.0 1,150.1
2006: I II IV	12,915.9 12,962.5 12,965.9 13,060.7	9,944.7 9,980.3 9,971.3 10,070.6	9,850.1 9,873.8 9,871.4 9,974.0	93.8 107.3 99.5 96.0	1,533.8 1,542.3 1,546.1 1,537.0	890.6 900.8 905.7 894.8	643.3 641.8 640.7 642.4	1,437.6 1,440.1 1,448.7 1,453.5	436.4 436.6 440.4 440.5	1,001.2 1,003.5 1,008.3 1,013.1	1,086.4 1,099.8 1,107.7 1,100.3
2007:                  V	13,099.9 13,204.0 13,321.1 13,391.2	10,090.8 10,176.9 10,270.2 10,323.5	9,995.8 10,086.1 10,183.9 10,229.1	94.4 90.8 87.2 93.9	1,552.4 1,565.7 1,583.1 1,593.9	905.2 912.5 925.7 934.8	647.4 653.5 657.7 659.4	1,456.9 1,461.8 1,468.5 1,474.6	439.4 438.9 443.3 445.4	1,017.5 1,022.9 1,025.2 1,029.3	1,115.1 1,128.0 1,146.0 1,158.1
2008: I II IV	13,366.9 13,415.3 13,324.6 13,141.9	10,289.9 10,318.1 10,220.8 10,030.6	10,185.0 10,219.2 10,115.1 9,917.5	102.3 98.0 103.4 110.0	1,592.4 1,604.4 1,599.7 1,597.8	930.2 938.0 930.0 927.2	662.5 666.5 669.9 670.8	1,484.8 1,492.7 1,502.7 1,509.7	450.2 455.1 462.3 469.1	1,034.6 1,037.6 1,040.4 1,040.6	1,152.3 1,160.6 1,153.0 1,150.1
2009: I II IV P	12,925.4 12,901.5 12,973.0 13,155.0	9,804.7 9,779.3 9,833.6 10,005.6	9,692.7 9,666.4 9,718.5 9,889.1	109.1 110.1 112.6 113.8	1,599.4 1,590.4 1,603.7 1,609.2	928.2 916.9 925.6 926.5	671.3 673.7 678.3 682.9	1,514.2 1,524.2 1,528.1 1,534.5	474.6 484.1 492.2 498.2	1,039.7 1,040.3 1,036.2 1,036.7	1,152.1 1,141.6 1,152.0 1,154.7

Gross domestic business value added equals gross domestic product excluding gross value added of households and institutions and of general government. Nonfarm value added equals gross domestic business value added excluding gross farm value added.
 Equals compensation of employees of nonprofit institutions, the rental value of nonresidential fixed assets owned and used by nonprofit institutions serving households, and rental income of persons for tenant-occupied housing owned by nonprofit institutions.
 3 Equals compensation of general government employees plus general government consumption of fixed capital.

TABLE B-12. Gross domestic product (GDP) by industry, value added, in current dollars and as a percentage of GDP, 1979-2008

[Billions of dollars; except as noted]

		Private industries										
	Gross		Agricul-			N	Manufacturing	J				
Year	domestic product	Total private industries	ture, forestry, fishing, and hunting	Mining	Con- struc- tion	Total manufac- turing	Durable goods	Non- durable goods	Utilities	Wholesale trade	Retail trade	
						Value added						
1979	2,563.3	2,217.7	70.6	58.4	127.0	543.8	331.1	212.7	51.9	175.8	193.2	
1980 1981 1982 1983 1984 1985 1986 1988 1989	2,789.5 3,128.4 3,255.0 3,536.7 3,933.2 4,220.3 4,462.8 4,739.5 5,103.8 5,484.4 5,803.1	2,405.8 2,702.5 2,792.6 3,043.5 3,395.1 3,637.0 3,842.9 4,080.4 4,399.1 4,732.3	62.0 75.4 71.3 57.1 77.1 74.2 79.8 80.2 92.8	91.3 122.9 120.0 103.1 107.2 105.4 68.9 71.5 71.4 76.0	130.3 131.8 128.8 139.8 164.4 184.6 207.7 218.2 232.7 244.8	556.6 616.5 603.2 653.1 724.0 740.3 766.0 811.3 876.9 927.3	333.9 370.4 353.4 379.3 443.5 449.2 459.3 483.8 519.0 543.2	222.7 246.1 249.8 273.8 280.5 291.1 306.7 327.5 357.9 384.1	60.0 70.7 81.7 91.6 102.3 109.2 114.4 123.0 122.8 135.9	188.7 208.3 207.9 222.9 249.4 268.3 278.5 285.3 318.1 337.4	200.9 221.0 229.9 261.6 293.6 318.7 336.6 349.9 366.0 389.0	
1991 1992 1993 1994 1995 1996 1997 1998	5,995.9 6,337.7 6,657.4 7,072.2 7,397.6 7,816.9 8,304.3 8,747.0 9,268.4	5,138.7 5,440.4 5,729.3 6,110.5 6,407.2 6,795.2 7,247.5 7,652.5 8,127.2	89.2 99.6 93.1 105.6 93.1 113.8 110.7 102.4 93.8	76.0 71.3 72.1 73.6 74.1 87.5 92.6 74.8 85.4	230.2 232.5 248.3 274.4 287.0 311.7 337.6 374.4 406.6	957.5 996.7 1,039.9 1,118.8 1,177.3 1,209.4 1,279.8 1,343.9 1,373.1	540.9 562.8 593.1 647.7 677.2 706.5 755.5 806.9 820.4	416.6 433.8 446.8 471.1 500.0 502.9 524.3 537.0 552.7	152.5 157.4 165.3 174.6 181.5 183.3 179.6 180.8 185.4	360.5 378.9 401.2 442.7 457.0 489.1 521.2 542.9 577.7	398.8 405.5 430.0 458.0 493.3 514.9 543.8 574.2 598.6 635.5	
2000	9,817.0 10,128.0 10,469.6 10,960.8 11,685.9 12,421.9 13,178.4 13,807.5 14,264.6	8,614.3 8,869.7 9,131.2 9,542.3 10,194.3 10,853.1 11,529.3 12,064.6 12,424.6	98.0 97.9 95.4 114.4 142.2 133.3 121.6 167.9 157.7	121.3 118.7 106.5 143.3 171.3 223.8 262.4 275.0 325.3	435.9 469.5 482.3 496.2 539.2 605.4 646.0 610.8 581.5	1,426.2 1,341.3 1,352.6 1,359.3 1,427.9 1,480.6 1,577.4 1,616.8 1,637.7	865.3 778.9 774.8 771.8 807.5 845.1 899.4 922.0 914.7	560.9 562.5 577.9 587.5 620.4 635.5 678.0 694.9 723.0	189.3 202.3 207.3 220.0 240.3 239.5 272.7 281.4 306.0	591.7 607.1 615.4 637.0 686.7 722.4 773.2 805.3 818.8	662.4 691.6 719.6 751.5 776.9 824.7 866.5 892.5	
	Percent				Industry value	added as a p	ercentage of	GDP (percent	)			
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	86.5 86.2 86.4 85.8 86.1 86.3 86.2 86.1 86.3	2.8 2.2 2.4 2.2 1.6 2.0 1.8 1.7 1.7	2.3 3.3 3.9 3.7 2.9 2.7 2.5 1.5 1.4	5.0 4.7 4.2 4.0 4.0 4.2 4.4 4.7 4.6 4.6 4.5	21.2 20.0 19.7 18.5 18.5 18.4 17.5 17.2 17.1 17.2	12.9 12.0 11.8 10.9 10.7 11.3 10.6 10.3 10.2 9.9	8.3 8.0 7.9 7.7 7.7 7.1 6.9 6.9 7.0	2.0 2.2 2.3 2.5 2.6 2.6 2.6 2.6 2.6 2.4 2.5	6.9 6.8 6.7 6.4 6.3 6.3 6.4 6.2 6.0 6.2	7.5 7.2 7.1 7.1 7.4 7.5 7.6 7.5 7.4 7.2	
1990	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	86.1 85.8 86.1 86.4 86.6 86.9 87.3 87.5 87.7 87.6 87.2 87.4 87.2	1.7 1.5 1.6 1.4 1.5 1.3 1.2 1.0 1.0 9 1.0 1.2 1.2	1.5 1.3 1.1 1.0 1.0 1.1 1.1 1.2 1.2 1.0 1.3 1.5	4.3 3.8 3.7 3.7 3.9 4.0 4.1 4.3 4.4 4.4 4.6 4.6 4.5 4.6 4.9	16.3 16.0 15.7 15.6 15.8 15.9 15.4 14.8 14.5 12.9 12.4 12.9 11.9	9.4 9.0 8.9 9.2 9.2 9.0 9.1 9.2 8.9 7.7 7.4 7.0 6.9 6.8	7.0 6.9 6.7 6.4 6.3 6.1 5.7 5.5 5.4 5.1	2.5 2.5 2.5 2.5 2.5 2.3 2.2 2.1 2.0 1.9 2.0 2.0 2.0 2.1 1.9	6.0 6.0 6.0 6.3 6.2 6.3 6.2 6.0 6.0 5.9 5.9 5.8	6.9 6.8 6.9 7.0 7.0 6.9 6.7 6.8 6.9 6.9 6.6	
2006 2007 2008	100.0 100.0 100.0	87.5 87.4 87.1	.9 1.2 1.1	2.0 2.0 2.3	4.9 4.4 4.1	12.0 11.7 11.5	6.8 6.7 6.4	5.1 5.0 5.1	2.1 2.0 2.1	5.9 5.8 5.7	6.6 6.5 6.2	

Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.
 Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and other services, except government.

Note: Data shown in Tables B-12 and B-13 do not reflect the benchmark revision of the National Income and Product Accounts released in July 2009. For details see Survey of Current Business, May 2009.

TABLE B-12. Gross domestic product (GDP) by industry, value added, in current dollars and as a percentage of GDP, 1979-2008-Continued

[Billions of dollars; except as noted]

			Drivoto i							
Year	Transpor- tation and ware- housing	Information	Finance, insurance, real estate, rental, and leasing	Profes- sional and business services	Educational services, health care, and social assistance	Arts, entertain- ment, recreation, accommo- dation, and food services	Other services, except government	Government	Private goods- producing industries <sup>1</sup>	Private services- producing industries <sup>2</sup>
					Value	added				
1979	96.6 102.3 109.9 105.9 105.9 105.9 117.8 131.4 136.3 145.6 151.1 164.1 168.1 178.2 186.6 221.0 226.3 235.2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	90.3 99.0 112.7 123.6 140.0 147.1 185.9 173.1 185.0 194.0 225.1 235.2 250.9 272.6 294.0 307.6 335.7 347.8 331.6 488.3 488.3 488.1 559.6 559.6	390.3 442.4 498.4 539.9 604.6 670.2 729.7 795.1 840.3 910.1 975.4 1,042.1 1,103.6 1,177.4 1,241.5 1,297.8 1,383.0 1,470.7 1,593.3 1,684.6 1,798.4 1,931.0 2,059.2 2,141.9 2,244.6 2,378.8 2,527.9 2,685.8	164.0 186.3 213.2 220.9 262.5 303.8 378.8 414.1 466.3 518.0 569.8 47.43.1 896.5 97.9 1,169.9 1,169.9 1,140.8 1,165.9 1,140.8 1,165.9 1,140.8 1,165.9 1,140.8 1,165.9 1,140.8 1,165.9 1,140.8 1,165.9 1,140.8 1,165.9 1,140.8 1,165.9 1,140.8 1	120.5 139.7 159.9 177.9 198.3 214.1 231.3 256.5 309.1 347.0 366.7 442.8 463.5 488.0 511.1 533.3 799.6 687.3 969.7	77.1 83.5 93.5 100.9 100.9 112.0 121.2 134.3 144.9 155.1 165.9 180.2 216.2 225.5 235.0 248.3 264.4 289.8 360.0 327.8 361.5 361	58.2 62.6 68.5 70.7 77, 79.2 89.3 98.0 107.2 117.3 124.4 133.9 142.6 153.0 163.7 173.2 189.9 188.1 197.4 221.1 241.5 252.5 265.3 273.9 287.5	345.7 383.7 425.9 462.4 493.1 583.3 620.0 659.1 704.7 752.0 805.3 805.3 805.3 805.1 901.8 900.4 1,094.5 1,141.2 1,202.7 1,258.3 1,338.4 1,419.6 1,568.8 1,491.6 1,568.8	799.7 840.2 946.6 923.3 953.1 1,072.7 1,107.4 1,116.7 1,261.3 1,341.0 1,371.0 1,372.4 1,450.0 1,572.4 1,672.4 1,572.4	1,417.9 1,565.6 1,755.9 1,869.3 2,090.5 2,322.3 2,529.5 2,726.1 2,899.5 3,137.8 3,391.4 3,785.9 4,040.5 4,275.9 4,538.0 4,775.8 5,072.8 5,426.8 5,757.1 6,168.3 6,532.8 6,842.2 7,094.3 7,429.1 7,913.7 8,409.9
2007 2008	407.2 414.9	586.3 622.0	2,811.2 2,848.4	1,694.1 1,805.8	1,087.0 1,157.9	513.3 536.3	315.6 326.8	1,742.9 1,840.0	2,670.6 2,702.2	9,394.0 9,722.4
		1		Industry valu	ue added as a p	percentage of (	GDP (percent)			
1979 1980 1981 1982 1983 1984 1985 1987 1989 1990 1990 1991 1991 1992 1993 1994 1995 1996 1997 1998 2000 2001 2002 2004 2004 2005 2006 2007	3.8 3.7 3.5 3.3 3.3 3.2 3.2 3.0 2.9 3.0 2.9 3.0 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1	3.5 3.6 3.6 3.7 3.9 3.9 3.9 3.9 4.0 4.1 4.2 4.2 4.3 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7	15.2 15.9 15.9 16.6 17.1 17.0 17.3 17.8 17.7 17.8 18.0 18.4 18.6 18.6 18.4 19.2 19.3 19.4 19.7 20.5 20.5 20.4 20.4 20.4 20.4	6.4 6.7 6.7 7.1 7.4 7.7 8.1 8.5 8.7 9.1 9.4 9.8 9.7 9.9 9.9 9.9 9.9 10.0 10.4 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11	4.7 5.0 5.1 5.5 5.6 6.0 6.1 6.3 7.2 7.1 7.2 7.1 6.9 6.8 6.9 7.3 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8	3.0 3.0 3.0 3.1 3.1 3.2 3.2 3.2 3.3 3.3 3.4 3.4 3.4 3.5 3.5 3.5 3.6 3.6 3.7 3.6 3.7 3.7 3.7	2.3 2.2 2.2 2.2 2.3 2.3 2.3 2.4 2.4 2.4 2.5 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4	13.5 13.8 13.6 14.2 13.9 13.9 13.9 13.9 13.8 13.7 13.7 13.1 12.7 12.5 12.3 12.3 12.4 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8	31.2 30.1 30.3 28.4 26.9 25.0 25.0 20.0 24.7 24.7 22.6 22.1 21.1 21.8 22.2 22.1 21.7 21.1 21.9 21.1 21.9 21.1 21.1 21.9 21.1 21.9 21.1 21.1	55.3 56.1 57.4 59.1 59.0 59.9 61.1 61.2 61.5 61.8 62.4 63.1 63.8 64.2 64.2 64.2 64.6 64.9 65.3 65.8 66.6 67.8 67.7 67.7 67.7 68.0 68.2

Note (cont'd): Value added is the contribution of each private industry and of government to GDP. Value added is equal to an industry's gross output minus its intermediate inputs. Current-dollar value added is calculated as the sum of distributions by an industry to its labor and capital, which are derived from the

Value added industry data shown in Tables B–12 and B–13 are based on the 1997 North American Industry Classification System (NAICS). GDP by industry data based on the Standard Industrial Classification (SIC) are available from the Department of Commerce, Bureau of Economic Analysis.

Table B–13. Real gross domestic product by industry, value added, and percent changes,  $1979{-}2008\,$ 

						Private i	ndustries				
	Gross		Agricul-			N	Manufacturing	1			
Year	domestic product	Total private industries	ture, forestry, fishing, and hunting	Mining	Con- struc- tion	Total manufac- turing	Durable goods	Non- durable goods	Utilities	Wholesale trade	Retail trade
				Chain-t	ype quantity i	ndexes for va	lue added (20	00=100)			
1979	52.699	50.606	48.573	79.749	81.174	50.843	40.808	70.282	54.661	39.888	40.701
1980 1981 1982 1983 1984 1985 1986 1987 1989 1990 1990 1991 1991 1992 1993 1994 1995 1996	52,579 53,904 52,860 55,249 59,220 61,666 63,804 68,684 71,116 72,451 72,329 74,734 76,731 79,816 81,814 84,842 88,658	50.321 51.720 50.422 52.785 56.789 59.383 61.137 63.367 66.299 68.710 69.905 69.779 72.363 74.291 77.765 79.722 83.179 87.362	47.543 59.731 62.961 43.338 57.105 69.555 68.605 71.483 64.678 71.099 74.689 75.398 83.114 72.838 84.616 73.099 80.041	89.978 90.260 86.329 81.175 88.849 93.077 87.529 91.661 99.992 97.072 96.157 97.638 95.694 97.020 105.327 105.681 98.850 102.463	74,626 67,939 59,460 62,805 72,200 79,043 81,818 82,448 85,435 87,646 86,543 79,137 80,026 82,010 86,586 86,312 90,694 93,267	48.190 50.480 46.795 50.455 55.084 56.582 56.516 60.746 64.212 65.033 64.299 63.412 65.508 68.255 73.496 76.819 79.682 84.518	38.476 39.563 35.645 37.953 44.042 45.187 48.859 52.843 53.696 52.742 55.173 60.173 65.218 69.220 75.335	67.152 72.303 69.864 76.660 76.466 78.688 77.515 83.572 85.425 86.109 85.419 85.835 89.669 92.943 98.369 97.783 98.443	51.968 51.733 50.698 52.706 57.341 60.940 72.315 70.613 79.002 84.447 85.285 85.362 85.818 93.835 95.405	39.782 42.074 42.096 43.770 47.143 49.523 54.486 53.070 56.444 58.603 57.318 59.387 65.037 67.135 71.346 70.800 77.261	38.907 40.035 39.951 44.123 48.265 51.232 54.187 52.138 56.545 58.838 59.794 59.483 62.960 65.351 69.806 72.974 79.407 86.039
1998 1999	92.359 96.469	87.362 91.662 96.183	88.315 86.287 89.163	101.682 104.300	97.087 99.411	90.181 94.104	84.355 89.627	99.762 101.298	90.481 94.672	95.431 100.412	90.399 95.686
2000	100.000 100.751 102.362 104.931 108.748 111.944 115.054 117.388 118.692	100.000 100.908 102.354 105.068 109.198 113.068 116.591 118.990 119.678	100.000 93.661 98.767 106.173 113.287 122.911 116.434 124.524 123.854	100.000 94.715 88.719 87.922 88.770 85.440 91.760 91.835 91.056	100.000 100.163 98.201 96.189 96.430 95.996 92.039 81.769 77.183	100.000 94.436 97.066 98.168 103.653 104.543 110.312 113.488 110.382	100.000 94.031 95.663 98.169 103.873 109.622 118.547 124.191 122.621	100.000 95.034 99.056 98.265 103.468 98.292 100.388 100.819 96.166	100.000 95.081 99.144 105.990 112.076 105.443 106.638 107.881 109.945	100.000 107.003 108.059 110.380 112.614 116.279 116.980 117.968 116.240	100.000 106.970 109.294 113.559 116.533 126.923 133.983 140.077 139.396
					Percent c	hange from ye	ear earlier				
1979	3.2	3.7	7.8	-10.3	3.5	3.4	1.6	6.4	-8.3	7.6	0.1
1980 1981 1982 1983 1984 1985 1986 1987 1988	2 2.5 -1.9 4.5 7.2 4.1 3.5 3.4 4.1 3.5	6 2.8 -2.5 4.7 7.6 4.6 3.0 3.6 4.6 3.6	-2.1 25.6 5.4 -31.2 31.8 21.8 -1.4 4.2 -9.5 9.9	12.8 .3 -4.4 -6.0 9.5 4.8 -6.0 4.7 9.1 -2.9	-8.1 -9.0 -12.5 5.6 15.0 9.5 3.5 8 3.6 2.6	-5.2 4.8 -7.3 7.8 9.2 2.7 1 7.5 5.7 1.3	-5.7 2.8 -9.9 6.5 16.0 2.6 .8 7.3 8.2 1.6	-4.5 7.7 -3.4 9.7 3 2.9 -1.5 7.8 2.2	-4.9 5 -2.0 4.0 8.8 6.3 5.7 12.3 -2.4 11.9	3 5.8 .1 4.0 7.7 5.0 10.0 -2.6 6.4 3.8	-4.4 2.9 -2 10.4 9.4 6.1 5.8 -3.8 8.5 4.1
1990 1991 1992 1993 1994 1995 1996 1997 1998 2000 2001 2002 2003 2004 2005 2006 2007 2007	1.9 -2 3.3 2.7 4.0 2.5 3.7 4.5 4.5 3.7 8 2.5 3.6 2.5 2.8 2.0	1.7 -2 3.7 4.7 2.5 4.3 5.0 4.9 4.9 4.0 .9 3.5 3.5 3.1 2.1.6	5.0 .9 10.2 -12.4 16.2 -13.6 9.5 10.3 -2.3 3.3 12.2 -6.3 5.7.5 6.7 5.3 6.9 -5.3	9 1.5 -2.0 1.4 8.6 8.6 3.7 -8.2 -4.1 -5.3 -6.9 1.00 -3.8 7.4 1.1 1.8	-1.3 -8.6 1.1 1.1 2.5 5.6 6 -3.1 2.8 4 4.1 4.4 6.2 -2.0 -2.0 3.3 -5.5 -4.1 -11.2 -5.6 6	-1.1 -1.4 3.3 4.2 7.7 4.5 6.1 6.3 -5.6 2.9 5.5 2.9 -2.7	-1.4 -2.8 2.4 4.6 9.1 8.4 6.0 9.0 11.6 -6.0 1.7 2.6 5.8 8.1 4.8	8 .55 .455.37 5.8 66 7 2.0 1,5 -1.3 -5.0 4.2 8 5.3 5.0 1,4 4,6	6.9 1.0 1.1 1.5 4.3 4.8 4.8 4.7 -7.4 6.9 4.3 6.9 5.7 5.7 -1.1 1.2	-2.2 3.6 9.5 3.2 6.3 -8 9.1 10.9 11.4 5.2 -4 7.0 2.1 2.0 3.3 .6 8.8 5.8	1.6

<sup>&</sup>lt;sup>1</sup> Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.
<sup>2</sup> Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and other services, except government.

Table B–13. Real gross domestic product by industry, value added, and percent changes,  $1979{-}2008{-}Continued$ 

			Database							
Year	Transpor- tation and ware- housing	Information	Finance, insurance, real estate, rental, and leasing	Profes- sional and business services	Educational services, health care, and social assistance	Arts, entertain- ment, recreation, accommo- dation, and food services	Other services, except government	Government	Private goods- producing industries <sup>1</sup>	Private services- producing industries <sup>2</sup>
			1	Chain-type q	uantity indexes	for value add	ed (2000=100)			
1979	48.252	34.231	52.965	39.387	63.234	53.512	75.703	77.721	56.085	48.120
1980	47.232 46.178 43.855 49.486 52.121 52.715 53.021 55.690 57.990 59.507	36.394 38.257 38.155 41.017 40.717 42.039 42.672 45.764 47.649 51.150	55.414 56.573 56.986 58.734 61.282 62.812 63.965 65.941 68.652 70.359	40.529 41.554 41.345 44.142 48.913 52.748 56.860 60.050 64.420 68.787 72.073	66.887 68.455 68.856 71.153 72.366 73.629 75.166 80.273 80.573 84.002	52.407 54.193 55.695 59.784 62.194 66.167 69.642 68.742 71.515 73.872 76.063	74.411 72.329 69.103 72.470 77.498 80.936 82.885 84.221 89.044 92.188 94.369	79.023 79.328 79.456 80.178 81.038 83.172 85.105 86.753 88.812 90.984	53.880 55.783 52.029 53.361 59.454 62.569 62.534 66.173 69.104 70.366	48.764 49.923 49.794 52.637 55.727 58.104 60.576 62.256 65.186 68.033
1991 1992 1993 1994 1995 1996 1997 1998	62.281 65.060 68.758 71.988 77.827 80.473 84.585 88.373 91.454 95.301	53.420 54.441 57.568 61.445 65.223 67.996 72.714 74.559 82.252 95.467	71.877 73.051 74.863 76.931 78.506 80.732 82.893 86.786 90.201 94.994	72.073 69.786 72.008 73.224 75.430 77.382 82.053 87.432 91.976 96.898	87.047 89.285 91.728 92.199 92.413 93.503 94.144 94.809 95.603 97.304	76.063 74.232 77.250 78.787 80.604 83.542 86.796 90.310 93.446 96.836	94.369 91.258 92.502 95.195 98.624 99.714 99.072 99.291 101.871 100.236	93.215 93.658 94.134 94.055 94.407 94.250 94.768 95.864 96.923 98.009	69.858 68.214 70.330 72.128 77.818 79.572 82.596 87.229 91.878 95.402	69.877 70.319 73.074 75.047 77.745 79.773 83.377 87.407 91.591 96.434
2000	100.000 97.354 99.531 101.534 110.780 115.253 117.627 120.592 116.091	100.000 104.034 106.263 109.430 122.221 132.881 136.503 147.542 155.211	100.000 103.858 104.800 107.288 110.433 115.054 119.756 122.183 122.100	100.000 99.346 99.192 103.554 107.750 113.709 117.579 122.646 129.361	100.000 103.186 107.527 112.257 115.949 119.231 123.043 125.627 131.207	100.000 99.292 101.022 104.138 108.114 110.366 114.158 116.126 118.049	100.000 98.337 98.667 100.615 100.770 102.776 102.381 102.756 103.026	100.000 100.794 102.467 103.776 104.252 104.962 105.509 106.914 109.033	100.000 95.654 96.853 97.402 101.328 101.915 104.628 103.880 100.718	100.000 102.584 104.107 107.496 111.692 116.624 120.414 123.870 125.879
				Р	ercent change	from year earl	er			
1979	5.6 -2.1 -2.2 -5.0 12.8 13.3 1.1.1 .6 4.7 4.5 5.7 4.7 4.5 4.5 3.4 5.1 4.5 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7 4.7	8.6 6.3 7.5 7.7 3.2 1.5 7.2 4.1 7.3 4.4 1.9 5.7 6.7 6.7 6.1 8.9 9.2 1.5 1.5 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	5.2 4.6 2.1,7 3.1 4.3 2.5 1.8 8.1 2.5 2.8 2.0 2.8 2.7 4.7 3.9 5.3 3.9 9.9 9.2 4.4 2.9 2.4 2.9 2.9 2.4 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9	6.8 2.9 2.5.5 6.8 7.8 7.8 7.3 6.6 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	4.2 5.8 2.3 3.3 1.7,7 1.7,2 1.1 6.8 4.4 3.3 3.6 2.6 2.7,5 5.7 1.2 1.2 2.1 2.2 4.2 4.3 3.3 2.8 3.2 4.4 4.3 3.3 3.2 4.4 4.3 3.2 4.4 4.3 3.2 4.4 4.3 3.2 4.4 4.3 3.2 4.4 4.3 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 3.2 4.4 4.4 4.4 5.4 4.4 5.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6	2.8	0.8 -1.7 -2.8 -4.5 -4.9 -4.9 -4.4 -2.4 -3.3 -1.4 -3.3 -6.6 -1.6 -2.2 -1.6 -2.2 -1.6 -2.2 -1.6 -2.4 -3.3 -3.4 -3.3 -3.4 -4.3 -3.4 -4.3 -4.3	1.3 1.7 4.4 9.9 1.1 1.26 2.3 1.9 2.4 2.4 2.5 5.5 -1 1.4 4.2 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.3 5.7 1.3 5.7	2.7 -3.9 3.5.7 2.6 11.4 1.5 2.2 -1.1 5.8 4.4 1.8 -7.7 -2.4 3.1 3.6 5.3 3.8 4.8 -4.3 1.3 6.6 4.0 6.7 -7.	4.2 1.3 2.4 3 5.7 5.9 4.3 4.3 4.3 4.7 2.6 4.5 2.7 3.9 2.7 3.6 4.8 4.8 4.8 5.3 3.7 2.6 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8

Note: Data are based on the 1997 North American Industry Classification System (NAICS). See Note, Table B-12.

Table B-14. Gross value added of nonfinancial corporate business, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

						Ne	t value add	ded					Addenda	
Year or quarter	Gross value added of non- financial	Con- sump- tion of	Tatal	Com- pensa- tion	Taxes on produc- tion and		Net interest	Net operat Busi- ness	tory val	e profits wi uation and ption adjus	capital	Profits	Inven- tory valua-	Capital
	corpo- rate busi- ness <sup>1</sup>	fixed capital	Total	of employ- ees	imports less sub- sidies	Total	and miscel- laneous pay- ments	current transfer pay- ments	Total	Taxes on corpo- rate income	Profits after tax <sup>2</sup>	before tax	Inventory valuation adjustment  I	sumption adjust- ment
1960	276.4 283.7 309.8 329.9 356.1 391.2 497.8 540.5 558.3 669.4 750.8 876.7 989.7 1,119.4 1,272.7 1,414.4 1,534.5 1,742.6 1,929.1 2,161.4 2,161.4 2,161.4 2,161.4 2,161.4 4,125.5 3,035.2 3,035.2 3,104.1 3,398.4 4,119.5 4,668.3 4,119.5 5,279.4 4,412.5 5,279.4 4,412.5 5,279.4 4,412.5 5,279.5 6,668.1	23.1 23.7 24.5 25.6 27.0 29.1 33.7 42.9 47.5 56.5 63.1 74.2 88.6 97.8 110.1 125.1 144.3 166.7 192.8 219.3 224.0 257.0 287.3 336.1 336.1 346.1 349.9 499.9 599.3 599.3 599.3 590.9 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 695.6 743.0 695.6 695.6 695.6 743.0 749.0 74	253.3 260.1 285.2 304.3 329.0 362.1 416.0 459.1 497.5 510.8 5551.8 5551.8 557.1 613.0 687.6 687.3 687.6 687.6 687.3 687.6 687.3 687.6 687.3 687.6 687.3 687.6 689.4 6.6 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	180.4 184.5 199.3 210.1 225.7 245.4 272.9 357.1 376.5 399.4 443.9 502.2 575.5 651.4 735.3 845.1 1,047.2 1,157.6 4,120.4 1,200.4 1,203.4 1,496.1 1,575.4 1,496.1 1,575.4 1,496.1 1,575.4 1,496.1 1,575.4 2,005.5 2,044.8 2,152.9 2,244.0 2,382.1 2,511.5 2,663.3 3,541.8 3,541.8 3,541.8 3,541.8 3,541.8 3,541.8 3,651.3 3,786.3 4,182.3 4,182.3 4,182.3 4,182.3 4,182.3 4,182.3 4,182.3 4,182.3 4,182.3 4,182.3 4,182.3	26.6 27.6 29.9 31.7 33.9 36.0 37.0 39.3 45.5 50.2 59.2 59.2 59.5 63.7 70.1 80.2 80.2 84.6 102.7 108.8 121.5 146.6 204.6 204.6 216.8 233.8 248.2 263.5 318.0 347.8 354.2 365.3 367.8 461.9 367.8 461.9	46.3 47.9 56.1 6.9 5.6 1.0 6.9 5.6 1.0 6.9 5.0 80.7 7.2 85.6 6.9 5.0 80.7 7.2 85.6 6.9 5.0 80.7 1.0 5.4 1.15.4 1.0 5.4 1.15.4 1.0 5.4 1.15.4 1.0 5.0 1.0 5.0 1.0 5.0 1.0 5.0 1.0 5.0 1.0 5.0 1.0 5.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	3.2 3.7 4.3 4.7 5.2 5.8 7.0 8.4 9.7 12.7 16.6 17.6 28.5 28.4 26.0 28.5 33.4 41.8 54.2 67.2 77.0 86.0 91.5 95.9 91.7 99.8 98.8 112.7 112.1 124.1 112.1 124.1 144.0 145.0	1.4 1.5 1.7 2.0 2.2 2.7 2.8 3.1 3.2 3.3 3.7 4.0 9.0 9.5 10.2 11.4 8.8 10.5 11.7 16.1 27.3 29.9 27.4 24.0 25.4 26.6 31.3 30.1 35.3 30.1 35.3 35.2 47.1 47.1 47.1 47.1 47.1 47.1 47.1 47.1	41.7 42.7 50.1 62.4 72.7 77.5 74.4 60.2 70.8 82.8 88.9 77.5 98.9 121.0 141.9 151.8 151.8 151.8 151.8 249.6 219.5 259.9 304.3 283.5 276.7 271.3 296.1 347.5 433.5 467.5 537.4 470.6 537.4 537.4 537.4 537.4 537.5 537.4 653.5 653.7 6		22.6 23.3 29.5 33.4 48.0 46.5 45.4 41.0 32.9 40.8 49.0 67.5 81.3 89.2 66.5 100.8 118.7 200.3 118.7 200.3 118.7 200.3 118.7 200.3 118.7 201	40.1 39.9 44.6 49.7 55.9 661.1 71.4 67.6 774.0 71.2 58.5 67.4 79.5 110.7 138.2 159.5 110.7 138.2 149.0 140.0 163.4 197.6 243.1 243.1 243.1 243.1 243.1 243.1 243.1 243.1 243.1 243.1 243.1 243.3 258.6 308.7 391.9 405.9	.0 .1 .15.7 1.6 2.1 3.6 4.6 19.6 38.2 10.5 14.1 15.7 24.6 7.5 7.4 4.0 16.2 16.3 12.9 12	1.9 2.5 5.4 4.7.0 7.8 8.1 8.3 8.3 8.3 8.9 9.1 9.9 9.0 9.5 -1.2 -3.2 -1.9 -3.2 -7.2 62.3 56.7 71.5 62.6 62.3 56.7 62.3 56.7 63.0 63.0 63.0 65.3 67.5 68.9 89.9 57.6 63.0 63.0 63.0 65.3 67.5 63.0 65.3 67.5 66.3 67.5 66.3 67.5 66.3 67.5 66.3 67.5 66.3 67.5 66.3 67.5 66.3 67.5 66.3 67.5 67.5 67.5 67.5 67.5 67.5 67.5 67.5
III IV 2007: I III IV	6,811.8 6,851.8 6,909.3 6,988.8 6,949.7 7,032.6	807.8 820.1 831.6 843.4 855.3 867.5	6,004.0 6,031.7 6,077.7 6,145.4 6,094.4 6,165.1	4,180.3 4,264.2 4,314.0 4,345.1 4,365.4 4,432.2	596.3 602.0 604.8 610.5 614.8 620.9	1,227.3 1,165.5 1,159.0 1,189.7 1,114.1 1,112.0	164.8 180.9 201.2 223.6 236.6 251.2	74.9 73.5 70.3 68.4 67.5 68.4	987.6 911.1 887.5 897.7 810.1 792.4	329.3 298.3 313.3 305.3 284.4 294.2	658.3 612.7 574.1 592.4 525.7 498.1	1,179.3 1,093.8 1,081.2 1,091.2 1,009.6 1,053.5	-42.3 -28.0 -42.2 -29.5 -25.3 -79.0	-149.4 -154.8 -151.5 -163.9 -174.1 -182.1
2008: I II III IV	6,934.9 6,974.4 7,042.4 6,934.1	879.8 892.2 904.6 917.1	6,055.1 6,082.2 6,137.8 6,017.0	4,429.6 4,431.6 4,440.4 4,410.1	618.5 623.5 627.8 614.2	1,006.9 1,027.1 1,069.6 992.7	242.1 246.0 233.3 246.8	68.1 68.3 68.7 76.5	696.7 712.8 767.6 669.4	255.9 263.1 254.5 177.7	440.8 449.7 513.1 491.6	851.6 895.6 882.0 597.4	-107.9 -129.6 -54.5 139.2	-47.0 -53.2 -60.0 -67.2
2009:            	6,703.8 6,671.9 6,665.2	916.7 903.0 894.0 893.2	5,787.1 5,768.9 5,771.2	4,238.5 4,194.4 4,198.3 4,218.0	602.7 603.1 593.9 607.8	945.8 971.4 979.0	237.4 229.2 219.2	79.2 83.2 73.1 75.3	629.2 659.0 686.6	197.9 217.0 227.0	431.3 442.1 459.6	676.9 755.2 809.4	81.1 18.1 –17.1	-128.7 -114.2 -105.7 -104.5

Estimates for nonfinancial corporate business for 2000 and earlier periods are based on the Standard Industrial Classification (SIC); later estimates are based on the North American Industry Classification System (NAICS).
 With inventory valuation and capital consumption adjustments.

Source: Department of Commerce (Bureau of Economic Analysis).

TABLE B-15. Gross value added and price, costs, and profits of nonfinancial corporate business, 1960-2009

[Quarterly data at seasonally adjusted annual rates]

	Gross valu	e added of		Price per u	nit of real gro	oss value add	ded of nonfina	ancial corpora	ate business	(dollars) 1, 2	
Year or quarter	nonfinancia	al corporate (billions		Com- pensation of		Unit non	abor cost		Corporate valuation a	e profits with and capital co adjustments	inventory onsumption
, our or quarter	Current dollars	Chained (2005) dollars	Total	employ- ees (unit labor cost)	Total	Con- sumption of fixed capital	Taxes on production and imports <sup>3</sup>	Net inter- est and miscel- laneous payments	Total	e profits with	Profits after tax <sup>5</sup>
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969	276.4 283.7 309.8 329.9 356.1 391.2 429.0 451.2 497.8 540.5	1,075.0 1,099.2 1,193.2 1,264.9 1,354.2 1,466.7 1,571.9 1,614.3 1,719.0	0.257 .258 .260 .261 .263 .267 .273 .279 .290	0.168 .168 .167 .166 .167 .167 .174 .180 .187	0.050 .052 .051 .050 .050 .050 .049 .053 .057	0.021 .022 .021 .020 .020 .020 .020 .022 .023	0.026 .027 .026 .026 .026 .026 .025 .026 .028	0.003 .003 .004 .004 .004 .004 .005 .006	0.039 .039 .042 .044 .046 .050 .049 .046	.018 .017 .018 .018 .019 .019 .017	0.021 .021 .025 .026 .028 .031 .031 .029 .026
1970	558.3 603.0 669.4 750.8 809.8 876.7 989.7 1,119.4 1,272.7 1,414.4	1,774.1 1,847.3 1,988.5 2,111.0 2,077.6 2,047.1 2,214.4 2,378.5 2,534.0 2,612.4	.315 .326 .337 .356 .390 .428 .447 .471 .502	.212 .216 .223 .238 .266 .281 .294 .309 .334	.068 .072 .071 .075 .087 .099 .098 .102 .106	.027 .028 .028 .030 .036 .043 .044 .046 .049	.032 .034 .034 .035 .038 .042 .042 .044 .044	.009 .010 .009 .010 .013 .014 .012 .012	.034 .038 .042 .042 .037 .048 .055 .060 .062	.016 .017 .019 .021 .020 .024 .025	.019 .022 .025 .023 .017 .028 .030 .034 .035
1980	1,534.5 1,742.2 1,802.6 1,929.1 2,161.4 2,293.9 2,383.2 2,551.0 2,765.4 2,899.2	2,584.7 2,687.9 2,622.6 2,746.2 2,989.4 3,120.3 3,197.9 3,364.7 3,560.4 3,618.2	.594 .648 .687 .702 .723 .735 .745 .758 .777	.405 .431 .458 .460 .468 .479 .493 .507	.136 .156 .173 .173 .172 .175 .185 .181 .184	.064 .072 .081 .080 .077 .078 .081 .080	.051 .059 .062 .065 .066 .068 .073 .073 .073	.021 .025 .030 .028 .029 .029 .031 .028 .030	.052 .062 .057 .070 .084 .080 .069 .077 .085	.025 .019 .022 .025 .023 .024 .028	.026 .038 .039 .047 .058 .057 .045 .049
1990 1991 1992 1993 1993 1994 1995 1996 1997 1998	3,035.2 3,104.1 3,241.1 3,398.4 3,677.6 3,888.0 4,119.4 4,412.5 4,668.3 4,955.5	3,672.6 3,655.5 3,768.0 3,866.5 4,115.3 4,309.4 4,548.0 4,843.8 5,123.5 5,422.5	.826 .849 .860 .879 .894 .902 .906 .911	.546 .559 .571 .580 .579 .583 .579 .581 .601	.205 .215 .210 .209 .209 .210 .210 .210 .211	.087 .092 .091 .093 .092 .095 .096 .096	.079 .085 .089 .090 .093 .089 .089 .087 .084	.039 .038 .030 .026 .024 .026 .025 .026 .029	.075 .074 .079 .090 .105 .109 .118 .121 .106	.024 .025 .028 .032 .033 .034 .033	.049 .050 .054 .062 .073 .077 .085 .088 .075
2000	5,279.4 5,252.5 5,307.7 5,503.7 5,877.5 6,302.8 6,740.3 6,970.1 6,971.5	5,707.9 5,604.6 5,629.3 5,767.4 6,040.4 6,302.8 6,536.5 6,649.4 6,675.5	.925 .937 .943 .954 .973 1.000 1.031 1.048	.621 .635 .630 .633 .627 .631 .640 .656	.222 .236 .237 .237 .234 .243 .250 .264 .275	.103 .113 .116 .116 .115 .118 .123 .128	.085 .088 .092 .095 .097 .101 .102 .102	.034 .035 .029 .026 .022 .024 .025 .034	.082 .066 .076 .084 .112 .127 .141 .127	.020 .017 .023 .031 .043 .047 .045 .036	.052 .046 .059 .061 .081 .083 .094 .082
2006:	6,629.5 6,668.1 6,811.8 6,851.8 6,909.3 6,988.8 6,949.7 7,032.6	6,505.1 6,480.0 6,567.2 6,593.8 6,597.4 6,649.8 6,624.9 6,725.5	1.019 1.029 1.037 1.039 1.047 1.051 1.049 1.046	.635 .641 .637 .647 .654 .653 .659	.245 .250 .250 .253 .258 .263 .268	.120 .123 .123 .124 .126 .127 .129	.102 .103 .102 .102 .102 .102 .103 .103	.023 .024 .025 .027 .030 .034 .036	.139 .138 .150 .138 .135 .135 .122 .118	.048 .050 .045 .047 .046	.093 .090 .100 .093 .087 .089 .079
2008: I	6,934.9 6,974.4 7,042.4 6,934.1 6,703.8	6,664.3 6,735.8 6,722.6 6,579.3 6,278.8	1.041 1.035 1.048 1.054 1.068	.665 .658 .661 .670	.271 .272 .274 .282 .293	.132 .132 .135 .139	.103 .103 .104 .105	.036 .037 .035 .038	.105 .106 .114 .102	.038 .039 .038 .027	.066 .067 .076 .075
	6,671.9 6,665.2	6,269.8 6,291.5	1.064 1.059	.669 .667	.290 .283	.144 .142	.109 .106	.037 .035	.105 .109		.071 .073

<sup>1</sup> Estimates for nonfinancial corporate business for 2000 and earlier periods are based on the Standard Industrial Classification (SIC); later estimates are based on the North American Industry Classification System (NAICS).

2 The implicit price deflator for gross value added of nonfinancial corporate business divided by 100.

3 Less subsidies plus business current transfer payments.

4 Unit profits from current production.

<sup>5</sup> With inventory valuation and capital consumption adjustments.

Table B-16. Personal consumption expenditures, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

		Goods Services								Adden-			
			Dura	able		Nondurable			ŀ	Household o		n	dum: Personal con-
Year or quarter	Personal con- sump- tion expendi- tures	Total	Total <sup>1</sup>	Motor vehicles and parts	Total <sup>1</sup>	Food and bever- ages pur- chased for off- premises consump- tion	Gasoline and other energy goods	Total	Total <sup>1</sup>	Housing and utilities	Health care	Financial services and insur- ance	sumption expenditures excluding food and energy 2
1960	331.8 342.2 363.3 382.7 441.5 443.8 480.9 507.8 558.0 605.1 648.3 701.6 4770.2 852.0 932.9 1.033.8 1.277.8 1.427.6 1.591.2 1.755.8 2.785.2 2.785.2 2.896.7 3.3594.5 3	177.0 178.8 189.0 198.2 212.3 2212.3 249.6 259.0 284.6 304.7 318.8 342.1 373.8 491.3 546.3 491.3 546.3 491.3 1,363.7 1,195.6 1,256.3 1,256.3 1,246.3 1,497.4 1,195.6 1,256.3 1,266.3 1	45.6 44.2 49.5 59.6 66.4 71.7 74.0 84.8 90.5 90.0 102.4 116.4 130.5 130.2 142.2 168.6 192.0 213.3 226.3 226.4 243.9 253.0 295.0 342.2 380.4 442.0 475.1 494.3 497.1 477.2 635.7 676.3 715.5 780.0 8946.3 996.1 1,014.8 1,061.8 1,065.5 1,095.2 1,034.4 1,132.5	19.6 17.7 21.4 24.2 25.8 29.9 29.6 29.9 29.6 35.4 43.2 49.4 48.2 52.6 68.2 90.2 84.4 93.0 100.0 122.9 207.8 188.2 202.2 207.8 205.1 185.7 204.8 255.7 273.5 293.1 320.2 350.7 273.5 394.5 404.7 397.1 409.6 397.1 409.8 409.8	131.4 134.6 139.5 143.9 152.7 163.3 177.9 185.0 199.8 214.2 228.8 239.7 257.4 286.1 321.4 349.2 511.6 673.4 646.3 678.8 646.3 678.8 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2		15.8 15.7 16.3 16.9 17.7 21.9 23.2 25.0 26.3 27.6 29.4 34.3 43.8 43.0 57.8 61.5 80.4 108.4 108.4 108.4 108.2 110.4 99.9 110.4 124.2 121.1 125.0 126.9 126.9 133.4 143.8	154.8 163.4 174.4 174.4 184.6 199.2 214.1 231.3 248.8 273.4 300.4 329.5 359.5 359.5 359.5 359.5 604.9 481.4 542.5 607.4 767.1 1.762.1 1.314.8 1.580.1 1.701.1 1.762.1 1.314.8 2.482.6 2.673.6 2.841.2 3.355.9 3.808.5 4.972.1 2.482.6 2.673.6 2.841.2 3.355.9 3.808.5 4.972.1 2.673.6 2.841.2 3.355.9 3.808.5 4.972.1 6.108.6 6.726.8 4.371.2 6.726.8 6.835.0 6.660.1 6.726.8 6.835.0 6.660.1 6.726.8 6.835.0	149.5 157.9 168.7 178.6 192.5 206.9 223.5 240.4 264.0 290.4 318.4 264.0 290.4 347.2 382.8 420.7 465.0 524.4 584.9 655.6 739.6 825.4 924.1 1.033.9 1.136.1 1.271.9 2.099.0 2.264.5 2.099.0 2.264.5 2.398.6 3.451.6 3.451.6 3.677.5 3.3677.5 3.	56.7 60.3 64.5 68.2 72.1 76.6 81.2 86.3 92.7 101.0 109.4 120.0 131.2 143.5 158.6 176.5 194.7 217.8 387.0 387.0 387.0 387.0 387.0 421.2 458.3 500.7 571.8 614.5 815.6 816.2 816	16.0 17.1 19.1 121.0 24.2 26.0 28.7 31.6 42.1 47.7 59.8 67.2 76.1 88.0 101.8 115.7 201.9 225.2 255.3 11.2 76.5 302.2 330.2 236.6 410.1 451.2 505.2 648.8 680.5 71.9 71.9 71.9 71.9 71.9 71.9 71.9 71.9	13.6 14.8 15.9 17.7 19.4 12.3 22.8 25.8 28.5 31.1 34.1 38.3 45.9 554.0 16.3 145.9 156.6 87.6 87.6 102.0 311.8 31.3 45.9 554.0 16.6 16.6 16.6 16.6 16.6 16.6 16.6 16	245.1 253.8 272.9 290.0 313.8 339.3 368.1 399.1 470.8 503.3 555.1 607.9 672.4 800.6 898.3 1,002.5 1,224.5 1,22
2007:            	9,658.5 9,762.5 9,865.6 10,019.2	3,306.3 3,338.2 3,366.6 3,448.9	1,153.0 1,154.9 1,161.4 1,172.7	399.6 401.3 398.3 401.9	2,153.3 2,183.3 2,205.2 2,276.2	727.1 732.1 742.7 758.4	335.2 362.4 365.4 408.8	6,352.2 6,424.3 6,499.0 6,570.3	6,103.7 6,179.5 6,242.8 6,305.8	1,741.4 1,755.8 1,770.4 1,784.8	1,442.9 1,458.4 1,475.2 1,501.7	799.3 819.5 835.3 842.8	8,386.4 8,456.4 8,545.7 8,644.3
2008: I II III IV	10,095.1 10,194.7 10,220.1 10,009.8	3,447.2 3,474.9 3,463.0 3,227.5	1,145.8 1,126.5 1,088.5 1,019.9	382.7 357.5 332.7 296.4	2,301.4 2,348.4 2,374.5 2,207.6	770.1 786.3 793.4 787.5	427.8 441.9 461.4 321.2	6,647.9 6,719.8 6,757.1 6,782.3	6,377.5 6,446.1 6,474.5 6,494.1	1,811.9 1,838.6 1,852.2 1,872.1	1,531.6 1,551.0 1,559.3 1,574.9	839.6 842.1 837.3 823.5	8,681.9 8,741.1 8,741.8 8,671.4
2009: I II III IV P	9,987.7 9,999.3 10,132.9 10,250.5	3,197.7 3,193.8 3,292.3 3,346.8	1,025.2 1,011.5 1,051.3 1,049.3	300.6 299.5 331.7 318.5	2,172.4 2,182.2 2,241.0 2,297.5	786.5 786.3 789.4 798.0	271.0 279.4 324.4 354.9	6,790.0 6,805.6 6,840.6 6,903.7	6,522.0 6,545.9 6,575.7 6,635.3	1,878.8 1,871.1 1,872.5 1,890.6	1,598.0 1,622.6 1,633.0 1,650.3	816.7 824.9 832.4 839.8	8,705.8 8,727.9 8,816.6 8,878.3

<sup>1</sup> Includes other items not shown separately.

2 Food consists of food and beverages purchased for off-premises consumption; food services, which include purchased meals and beverages, are not classified as food.

Source: Department of Commerce (Bureau of Economic Analysis).

#### Table B-17. Real personal consumption expenditures, 1995-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

				Go	ods					Services			Adden-
	Darsonal		Dur	able		Nondurable			H	Household ( expen	consumptio ditures	n	dum: Personal con-
Year or quarter	Personal con- sump- tion expendi- tures	Total	Total <sup>1</sup>	Motor vehicles and parts	Total <sup>1</sup>	Food and bever- ages pur- chased for off- premises consump- tion	Gasoline and other energy goods	Total	Total <sup>1</sup>	Housing and utilities	Health care	Financial services and insur- ance	sumption expenditures excluding food and energy 2
1995 1996 1997 1998	6,079.0 6,291.2 6,523.4 6,865.5 7,240.9	1,898.6 1,983.6 2,078.2 2,218.6 2,395.3	511.6 549.8 594.7 667.2 753.8	255.6 268.0 286.1 316.1 345.1	1,437.8 1,479.4 1,522.9 1,580.3 1,660.9	548.5 554.0 558.9 565.5 587.4	264.3 268.5 273.9 283.8 292.5	4,208.2 4,331.4 4,465.0 4,661.8 4,852.8	4,068.6 4,183.3 4,327.2 4,510.6 4,690.4	1,234.9 1,261.7 1,290.4 1,329.8 1,371.8	947.5 967.1 997.1 1,029.5 1,045.6	489.4 507.8 525.2 558.6 605.6	5,126.4 5,321.9 5,543.3 5,862.9 6,202.5
2000	7,608.1	2,521.7	819.9	356.1	1,714.7	600.6	287.1	5,093.3	4,917.8	1,413.7	1,081.5	665.4	6,548.6
	7,813.9	2,600.9	864.4	374.3	1,745.6	607.6	289.2	5,218.7	5,028.8	1,451.5	1,135.4	660.7	6,745.7
	8,021.9	2,706.6	930.0	394.0	1,780.2	609.0	294.0	5,318.1	5,109.3	1,462.0	1,202.3	658.3	6,941.9
	8,247.6	2,829.9	986.1	405.3	1,845.6	622.4	302.2	5,418.4	5,199.0	1,480.2	1,229.4	657.8	7,142.0
	8,532.7	2,955.3	1,051.0	411.3	1,904.6	639.2	306.5	5,577.6	5,359.3	1,512.8	1,268.6	691.8	7,402.6
	8,819.0	3,073.9	1,105.5	409.6	1,968.4	665.0	304.8	5,745.1	5,531.0	1,582.8	1,316.0	712.6	7,658.8
	9,073.5	3,173.9	1,150.4	396.6	2,023.6	686.2	298.4	5,899.7	5,664.4	1,616.7	1,340.0	735.4	7,905.7
	9,313.9	3,273.7	1,199.9	402.4	2,074.8	700.7	300.7	6,040.8	5,796.1	1,631.8	1,375.5	772.3	8,126.3
	9,290.9	3,206.0	1,146.3	347.5	2,057.3	700.7	287.4	6,083.1	5,817.6	1,647.2	1,416.4	759.8	8,123.6
	9,237.3	3,143.7	1,100.5	316.8	2,037.3	697.1	292.7	6,090.5	5,833.9	1,657.6	1,446.2	758.7	8,069.3
2006: I	8,986.6	3,145.7	1,142.3	393.3	2,003.7	676.7	296.4	5,841.0	5,618.2	1,598.9	1,337.3	726.0	7,837.8
II	9,035.0	3,150.8	1,139.4	393.2	2,011.6	684.2	297.2	5,884.2	5,652.1	1,617.8	1,339.2	731.3	7,868.0
III	9,090.7	3,176.4	1,152.1	400.3	2,024.5	686.6	300.0	5,914.3	5,671.4	1,627.6	1,335.8	735.6	7,914.3
IV	9,181.6	3,222.5	1,167.9	399.7	2,054.7	697.5	299.9	5,959.4	5,716.0	1,622.5	1,347.7	748.8	8,002.8
2007: I	9,265.1	3,253.9	1,183.7	402.4	2,070.3	700.8	301.5	6,011.7	5,770.8	1,629.3	1,365.1	762.8	8,074.9
II	9,291.5	3,255.4	1,189.9	404.1	2,066.1	696.2	301.3	6,036.2	5,799.2	1,630.1	1,371.7	776.7	8,106.7
III	9,335.6	3,280.6	1,205.0	400.5	2,076.8	699.2	301.5	6,055.5	5,809.8	1,634.6	1,377.6	779.1	8,146.4
IV	9,363.6	3,304.8	1,221.2	402.6	2,086.0	706.6	298.5	6,059.7	5,804.8	1,633.1	1,387.6	770.5	8,177.1
2008: I	9,349.6	3,262.1	1,193.2	384.4	2,070.1	708.0	292.6	6,087.1	5,827.3	1,643.8	1,409.0	766.1	8,164.7
II	9,351.0	3,257.8	1,175.7	361.4	2,081.4	708.9	289.9	6,092.5	5,831.2	1,647.3	1,418.2	763.8	8,170.8
III	9,267.7	3,193.6	1,139.6	337.8	2,051.5	699.6	280.1	6,072.4	5,805.2	1,641.6	1,416.1	758.5	8,120.1
IV	9,195.3	3,110.4	1,076.8	306.2	2,026.1	686.4	287.2	6,080.4	5,806.6	1,656.3	1,422.4	750.6	8,038.7
2009: I	9,209.2	3,129.8	1,087.2	311.2	2,035.5	687.4	293.2	6,076.0	5,817.2	1,656.9	1,434.3	751.4	8,047.7
II	9,189.0	3,105.4	1,071.7	306.2	2,025.7	693.5	294.0	6,078.8	5,826.7	1,651.8	1,448.2	756.1	8,028.2
III	9,252.6	3,159.6	1,122.7	335.2	2,033.3	700.1	292.7	6,090.6	5,834.3	1,654.0	1,448.6	761.8	8,086.3
IV P	9,298.5	3,180.0	1,120.3	314.7	2,054.6	707.3	290.7	6,116.4	5,857.2	1,667.8	1,453.7	765.5	8,115.1

<sup>&</sup>lt;sup>1</sup> Includes other items not shown separately.

Note: See Table B-2 for data for total personal consumption expenditures for 1960-94.

<sup>&</sup>lt;sup>2</sup> Food consists of food and beverages purchased for off-premises consumption; food services, which include purchased meals and beverages, are not

# Table B-18. Private fixed investment by type, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

						Nonresi	dential						Residentia	1
						Eq	uipment a	nd softwa	ire				Struc	tures
	Private	Total			Informa	ation proce and so	ssing equ ftware	ipment						
Year or quarter	fixed invest- ment	non- resi- den- tial	Struc- tures	Total	Total	Com- puters and periph- eral equip- ment	Soft- ware	Other	Indus- trial equip- ment	Trans- por- tation equip- ment	Other equip- ment	Total resi- den- tial <sup>1</sup>	Total <sup>1</sup>	Single family
1960   1961   1962   1963   1964   1965   1966   1966   1967   1970   1971   1975   1976   1977   1978   1979   1980   1981   1982   1983   1984   1985   1986   1987   1987   1988   1989   1999   19	75.7 75.2 88.0 88.1 97.2 109.0 117.7 118.7 132.1 147.3 150.4 169.9 198.5 228.6 235.4 236.5 274.8 339.0 412.2 448.6 542.6 542.6 542.6 542.6 542.6 542.6 542.6 542.6 542.6 1570.1 670.2 714.4 739.9 757.8 803.1 847.3 846.4 803.3 846.5 1.033.5 1.112.9 1.209.4 1.1717.7 1.700.2 1.634.9 1.717.3 1.903.6 2.122.3 2.269.1 2.170.8 1.747.9 2.269.1 2.170.8 1.747.9 2.279.7 2.264.2 2.254.1 2.278.8	49.4 48.8 53.1 56.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0 104.7 109.0 114.1 128.8 153.3 169.5 173.7 192.8 42.2 42.8 42.0 42.8 42.0 42.8 42.0 42.8 42.8 42.8 42.0 42.8 43.3 43.3 43.3 44.0 42.8 43.3	196 6 197 7 208 8 21.2 22.3 7 28.3 31.5 33.6 6 65.9 9 18.6 65.9 9 18.6 65.9 17.7 22.8 8 22.8 22.8 22.8 22.8 22.8 22.8	29.8 29.1 32.3 34.8 39.2 46.5 54.0 554.9 67.0 68.7 71.5 81.7 98.3 108.2 226.2 226.2 226.2 225.7 248.9 262.9 3312.2 331.7 343.3 349.9 381.0 414.6 439.6 439.6 449.5 449.6 650.8 718.3 786.0 871.0 906.0 871.0 906.0 1,071.7 1,104.8 905.6 1,071.7 1,104.8 1,084.1	4,9,53,7,65,57,57,65,57,57,57,57,57,57,57,57,57,57,57,57,57	0.2 3.3 3.7 7.7 9.9 1.7 1.9 1.9 2.4 2.7 2.8 3.5 3.5 3.5 3.5 3.5 3.6 4.4 5.7 7.6 33.7 33.8 33.9 33.9 33.9 33.9 33.9 33.9 43.1 43.5 44.4 45.7 7.7 44.0 47.9 47.9 47.9 47.9 47.9 47.9 47.9 47.9	0.1 2 2 2 4 4 5 5 7 7 1100 12 2 13 13 13 13 13 13 14 15 12 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	4.6.4 4.8.6.5.1 5.4.4 5.1.7 6.7.7 8.0.0 8.2.2 8.7.7 11.6.6 8.2.2 12.2 12.2 12.2 12.2 12.2 12.2 12.	9.4 8.8 8.9.3 10.00 11.4 11.3 11.4 11.5 11.5 11.5 11.5 11.5 11.5 11.5	8.5 8.0 9.8 9.4 10.6 13.2 14.3 17.6 18.9 16.2 18.4 20.6 26.3 30.3 32.5 25.2 30.0 39.3 47.3 53.6 64.4 69.0 70.5 67.9 67.9 71.5 74.7 71.5 74.7 116.1 123.2 141.6 132.9 147.4 170.8 149.2 141.6 132.9 141.6 132.9 141.1 171.8 172.9 171.5 174.7 174.4 177.8 174.4 177.8 174.4 177.8 174.4 177.8 174.7 175.7 176.7 177.7 176.7 177.7 178.7 177.7 178.7 179.8 179.8 179.8 179.9	7.1 7.0 7.5 8.8 9.9 11.0 12.4 13.0 14.4 15.6 16.3 19.0 22.6 24.3 47.9 48.3 27.4 29.6 36.3 43.2 47.9 69.0 80.2 55.2 50.4 58.1 99.0 80.2 70.8 80.2 80.2 80.2 80.2 80.2 80.2 80.2 8	26.3 26.4 29.0 32.1 34.3 34.2 32.3 38.7 42.6 41.4 55.8 66.0 62.7 82.5 110.3 131.6 110.5 123.2 122.6 188.2 220.1 123.2 220.1 233.7 239.5 224.0 302.9 334.1 385.9 425.8 449.0 477.2 361.3 813.3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	25.8 25.9 28.4 31.5 33.6 33.5 31.6 37.9 41.6 68.1 73.6 68.1 107.9 128.9 118.9 118.9 118.9 118.9 122.0 1233.2 235.3 237.7 235.2	14.9 14.1 15.1 16.0 17.6 17.8 16.6 17.8 16.6 19.5 19.5 17.5 25.8 35.2 29.7 29.6 43.9 52.0 41.5 172.5 86.4 87.4 104.1 117.2 120.1 120.9 99.4 122.0 140.1 162.3 170.8 238.8 249.1 265.9 310.6 305.2 185.8 105.2 435.2 398.7 339.8 339.8 339.8
2008: I II IV	2,263.0 2,223.0 2,214.0 2,179.7 2,066.6	1,697.9 1,705.0 1,719.7 1,711.0 1,638.7	575.9 586.3 610.6 620.4 620.7	1,122.0 1,118.7 1,109.2 1,090.6 1,018.0	555.8 566.3 576.2 568.8 540.2	93.1 93.7 92.9 84.3 75.8	254.8 263.2 268.0 266.4 258.7	208.0 209.5 215.3 218.1 205.6	192.9 195.3 197.3 194.8 187.9	175.1 164.3 143.8 125.9 95.3	198.2 192.7 192.0 201.1 194.7	565.2 518.1 494.2 468.6 427.8	554.8 507.9 484.0 458.7 418.3	259.1 220.5 197.4 176.0 149.1
2009:               V <sup>p</sup>	1,817.2 1,737.7 1,712.6 1,724.0	1,442.6 1,391.8 1,353.9 1,358.2	533.1 494.8 457.9 436.8	909.5 897.0 895.9 921.5	508.3 512.2 519.0 540.3	71.1 72.0 72.5 83.3	240.5 240.2 241.4 245.1	196.7 200.1 205.1 211.9	157.8 151.4 146.5 145.9	65.4 70.6 73.2 80.5	178.0 162.7 157.2 154.8	374.6 345.9 358.8 365.7	365.2 336.8 349.6 356.5	111.8 93.1 105.2 110.9

<sup>&</sup>lt;sup>1</sup> Includes other items not shown separately.

### Table B-19. Real private fixed investment by type, 1995-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

		,			,,	Nonres			ry dujusti				Residentia	ıl
							uipment a	nd softwa	ire				Struc	
	Private fixed	Total			Informa	ation proce and so	essing equ ftware	ipment				Tatal		
Year or quarter	invest- ment	non- resi- den- tial	Struc- tures	Total	Total	Com- puters and periph- eral equip- ment 1	Soft- ware	Other	Indus- trial equip- ment	Trans- por- tation equip- ment	Other equip- ment	Total resi- den- tial <sup>2</sup>	Total <sup>2</sup>	Single family
1995 1996 1997 1998	1,235.7 1,346.5 1,470.8 1,630.4 1,782.1	792.2 866.2 970.8 1,087.4 1,200.9	342.0 361.4 387.9 407.7 408.2	493.0 545.4 620.4 710.4 810.9	149.5 179.1 220.8 271.1 332.0		66.9 78.5 101.7 122.8 151.5	93.7 102.7 111.5 125.5 139.9	145.5 150.9 154.1 160.8 161.8	131.5 136.8 148.2 162.0 190.3	110.6 114.8 125.9 138.8 142.4	456.1 492.5 501.8 540.4 574.2	450.1 486.8 496.3 534.5 567.5	240.2 262.4 261.6 290.1 311.5
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 p	1,913.8 1,877.6 1,798.1 1,856.2 1,992.5 2,122.3 2,171.3 2,126.3 2,018.4 1,646.7	1,318.5 1,281.8 1,180.2 1,191.0 1,263.0 1,347.3 1,453.9 1,544.3 1,569.7 1,289.1	440.0 433.3 356.6 343.0 346.7 351.8 384.0 441.4 486.8 391.0	895.8 866.9 830.3 851.4 917.3 995.6 1,069.6 1,097.0 1,068.6 887.9	391.9 390.2 379.3 405.0 443.1 475.3 514.8 555.7 588.8 553.7		172.4 173.7 173.4 185.6 204.6 218.0 227.1 241.5 257.0 238.3	168.4 163.2 148.4 156.4 168.1 178.4 191.2 202.3 211.1 202.3	175.8 162.8 151.9 151.6 147.4 159.6 172.9 180.9 174.7	186.2 169.6 154.2 140.4 162.3 181.7 196.5 177.4 128.9 66.1	150.4 149.3 148.2 155.0 164.4 178.9 185.5 184.1 180.3 144.8	580.0 583.3 613.8 664.3 729.5 775.0 718.2 585.0 451.1 359.1	572.6 575.6 605.9 655.9 720.1 765.2 708.1 575.0 441.5 350.0	315.0 315.4 327.7 362.6 406.1 433.5 391.1 283.9 179.7 108.8
2006: I II IV	2,200.2 2,189.9 2,162.2 2,132.9	1,424.9 1,450.3 1,466.0 1,474.5	364.8 383.7 393.2 394.6	1,060.7 1,066.3 1,072.0 1,079.3	505.7 508.9 520.4 524.1		222.4 224.8 228.5 232.8	192.2 189.8 191.9 191.0	165.1 176.2 174.7 175.6	202.6 194.1 193.7 195.5	187.3 187.0 183.4 184.3	775.2 740.1 697.4 660.2	764.9 730.0 687.3 650.2	442.4 409.4 374.6 338.0
2007:            	2,118.8 2,137.7 2,135.6 2,113.0	1,489.6 1,530.3 1,565.8 1,591.3	409.2 430.7 456.8 469.1	1,078.1 1,095.2 1,101.3 1,113.3	540.2 546.9 558.2 577.5		235.0 238.9 242.6 249.6	198.4 200.3 203.1 207.4	172.4 186.9 185.9 178.6	188.2 178.1 171.8 171.5	178.3 183.7 186.4 188.0	631.7 610.4 572.9 525.0	621.6 600.4 562.9 515.0	314.0 301.6 277.9 242.1
2008: I II IV	2,079.2 2,064.8 2,020.4 1,909.3	1,598.9 1,604.4 1,579.2 1,496.1	476.8 493.2 493.1 484.0	1,111.9 1,097.7 1,071.0 993.7	591.7 601.3 594.5 567.6		257.3 260.3 258.3 252.2	209.2 214.2 216.7 204.3	179.3 178.6 173.7 167.2	161.9 141.0 121.7 90.9	182.3 180.9 185.4 172.6	483.2 462.9 443.3 415.0	473.3 453.0 433.7 405.8	208.6 189.1 171.8 149.4
2009:            V P	1,687.5 1,631.9 1,626.7 1,640.6	1,321.2 1,288.4 1,269.0 1,278.1	419.4 400.0 380.2 364.6	887.5 876.5 879.8 907.7	537.5 544.8 554.9 577.6		235.5 236.2 239.2 242.2	195.8 199.1 203.9 210.5	140.8 135.2 130.4 129.2	59.8 62.7 66.0 76.0	157.3 144.0 140.1 137.9	367.9 344.4 359.6 364.6	358.9 335.5 350.5 355.2	112.9 96.3 110.4 115.5

<sup>&</sup>lt;sup>1</sup> For information on this component, see *Survey of Current Business* Table 5.3.6, Table 5.3.1 (for growth rates), Table 5.3.2 (for contributions), and Table 5.3.3 (for quantity indexes).

<sup>2</sup> Includes other items not shown separately.

Table B–20. Government consumption expenditures and gross investment by type,  $1960{-}2009\,$ 

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			[BIIIIONS						ted annua and gross		†			
					Governine	Federal	ption exp	enuntures i	anu gross	IIIVESUIIEI		State a	nd local	
				National	defense	Todordi		Nonde	efense			Otato u		vestment
Year or quarter					Gross in	/estment			Gross in	/estment		Con-		
	Total	Total	Total	Con- sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	Con- sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1978 1977 1978 1980 1981 1981 1982 1988 1989 1989 1990 1991 1992 1993 1994 1995 1998 1999 2000 2001 2002 2003 2004 2006 2007 2008 2009 p	111.5 119.5 130.1 136.4 171.6 192.5 209.3 221.4 233.7 246.4 263.4 281.7 357.7 383.0 414.1 453.6 500.7 566.1 627.5 680.4 733.6 733.6	64.1 67.9 75.2 76.9 78.4 80.4 104.6 80.1 1113.3 113.3 113.4 119.6 122.5 125.7	53.3 56.5 66.1 1 610.2 2 60.6 6 84.9 1 120.9 130.5 2 188.0 1 130.9 130.5 2 188.0 1 130.9 1 130.5 2 188.0 1 130.9 1 130.5 2 188.0 1 130.9 1 130.5 2 188.0 1 130.9 1 130.5 2 1 130.5 1 1	41.0 42.7 46.6 48.3 48.8 50.6 59.9 77.1 78.1 79.5 79.4 84.5 90.9 95.8 104.2 112.7 123.8 143.7 167.3 191.1 191.1 283.7 287.9 283.6 293.5 299.4 300.8 293.5 300.8 297.0 319.7 315.2 307.5 300.8 319.7 315.2 307.5 300.8 319.7 315.2 307.5 308.7 308.7 308.7 308.7 308.7 309.8 30	2.2 2.4 2.0 1.6 1.3 1.1.3 1.2 1.5 1.8 2.1 2.3 2.1 2.4 2.5 3.2 2.3 3.2 4.8 4.9 6.2 6.3 5.8 6.3 5.8 5.8 7.7 7.1 7.5 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	ware  10.1 11.5 12.5 11.0 10.2 8.9 10.5 12.3 10.9 9.9 9.9 9.7 5.7 6.6 8.9 7 6.6 8.9 7 13.2 14.4 15.3 18.9 21.1 25.7 30.8 53.9 56.1 58.8 56.3 56.3 59.8 58.3 56.1 47.2 45.4 39.9 42.8 43.6 51.2 55.4 62.4 66.8 72.9 76.8 91.0 95.5 69.7 74.8	10.7 11.4 14.1 15.9 20.8 21.2 22.0 22.8 8 25.8 8 29.1 7 34.5 1 10.6 6.4 4 65.4 5 6.0 4 6.4 6.4 6.4 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5	8.7 9.00 11.3 11.3 11.4 14.00 15.1 15.1 15.1 15.9 20.2 20.2 22.1 24.9 4.6 5.5 1.6 55.1 16.0 16.0 16.0 16.0 16.0 16.0 16.0 16	1.7 1.9 2.1 2.5 2.8 2.2 2.8 2.2 2.1 1.9 2.1 2.5 2.7 3.1.4 4.6 6.3 7.1 7.7 6.8 6.7 7.3 8.0 9.9 9.2 10.8 9.9 10.8 9.9 10.8 9.9 10.8 9.9 10.7 11.9 11.9 9.9 10.8 9.9 10.7 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11	0.3	47.5 51.6 6 54.9 87.9 108.2 120.3 143.8 159.2 132.8 143.8 159.2 233.7 262.7 330.5 6 466.1 510.9 577.3 619.2 709.5 619.2 120.3 143.8 159.2 120.3 143.8 159.2 120.3 143.8 159.2 120.3	33.5 36.6 39.0 41.9 45.8 50.2 56.1 62.6 70.4 79.8 91.5 102.7 113.2 126.0 143.7 165.1 179.5 195.9 213.2 233.3 258.4 228.3 324.1 347.7 381.8 418.1 441.4 471.0 504.5 606.2 764.5 608.2 764.5 808.6 870.6 994.2 1,086.5 1,139.1 1,252.4 1,430.9 1,252.4 1,430.9	12,7 13,8 14,5 160,0 17,2 190,0 25,2 25,2 25,2 27,0 27,1 38,1 36,9 42,8 84,8 84,8 84,8 88,7 74,2 54,2 66,6 66,6 66,6 66,6 67,6 67,6 67,6 67	1.2 1.3 1.3 1.5 1.8 2.1 2.4 2.7 3.1 3.5 5.7 5.9 6.6 7.8 8.9 5.5 10.6 21.5 26.0 28.7 28.9 30.1 21.5 26.0 28.9 30.1 31.3 34.3 35.5 36.9 36.9 36.9 36.9 36.9 36.9 36.9 36.9
2007: I	2,533.3 2,555.2 2,599.3 2,657.4 2,700.9 2,748.3	932.2 935.9 942.8 968.1 991.4 1,004.3	623.3 636.6 636.7 656.6 674.4 680.8	543.7 552.3 554.3 568.8 585.1 591.4	7.8 8.9 9.5 10.9 10.5 10.9	71.8 75.4 73.0 76.9 78.8 78.5	308.9 299.3 306.1 311.6 317.0 323.6	269.4 259.8 266.8 271.2 275.6 282.1	9.3 10.8 10.4 10.9 11.7 11.3	30.2 28.7 28.8 29.5 29.7 30.2	1,601.2 1,619.4 1,656.5 1,689.3 1,709.5 1,743.9	1,292.7 1,307.6 1,331.2 1,357.3 1,373.6 1,402.5	253.6 256.3 269.4 275.7 279.4 284.5	54.9 55.5 56.0 56.3 56.5 56.9
2008: I II IV	2,808.4 2,877.1 2,941.4 2,905.9	1,038.3 1,069.5 1,108.3 1,114.3	703.6 725.6 763.6 758.9	609.7 622.4 655.2 648.8	11.5 12.1 13.0 14.8	82.4 91.1 95.3 95.3	334.8 343.9 344.7 355.3	293.5 300.8 300.7 306.6	10.4 11.1 12.3 13.2	30.9 32.0 31.7 35.6	1,770.1 1,807.6 1,833.1 1,791.7	1,429.3 1,458.3 1,480.4 1,441.7	283.5 291.5 295.4 293.2	57.3 57.7 57.3 56.8
2009: I II IV P	2,879.0 2,929.4 2,955.4 2,969.5	1,106.7 1,138.3 1,164.3 1,170.4	750.7 776.2 795.8 793.8	642.9 662.7 679.3 682.4	15.8 16.4 18.5 16.3	91.9 97.2 98.0 95.1	356.0 362.1 368.5 376.5	311.3 316.4 321.9 330.3	13.2 13.2 13.3 13.0	31.5 32.4 33.2 33.2	1,772.3 1,791.2 1,791.1 1,799.1	1,424.4 1,429.9 1,429.8 1,439.7	292.5 305.8 305.9 303.5	55.4 55.4 55.4 55.9

TABLE B-21. Real government consumption expenditures and gross investment by type, 1995-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

					Governme	nt consum	ption expe	enditures	and gross	investmen	t			
						Federal						State a	nd local	
				National	defense			Nonde	efense				Gross in	vestment
Year or quarter	Total			Con-	Gross in	estment/		0	Gross in	vestment		Con- sump-		Fauia
	Total	Total	Total	sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	Con- sump- tion expen- ditures	Struc- tures	Equip- ment and soft- ware	Total	tion expen- ditures	Struc- tures	Equip- ment and soft- ware
1995 1996 1997 1998	1,888.9 1,907.9 1,943.8 1,985.0 2,056.1	704.1 696.0 689.1 681.4 694.6	476.8 470.4 457.2 447.5 455.8	424.5 418.5 412.2 401.2 407.6	10.1 9.2 8.7 8.1 7.2	43.7 43.8 38.9 40.1 42.4	227.5 225.7 231.9 233.7 238.7	201.2 196.2 203.2 201.2 202.9	15.7 15.9 13.8 14.5 14.0	13.7 15.5 16.6 18.7 21.7	1,183.6 1,211.1 1,254.3 1,303.8 1,361.8	983.0 1,001.0 1,027.7 1,070.8 1,109.5	175.4 184.3 196.7 196.5 210.9	29.1 29.9 33.1 37.7 41.8
2000	2,097.8 2,178.3 2,279.6 2,330.5 2,362.0 2,369.9 2,402.1 2,443.1 2,518.1 2,566.4	698.1 726.5 779.5 831.1 865.0 876.3 894.9 906.4 975.9 1,026.7	453.5 470.7 505.3 549.2 580.4 589.0 598.4 611.5 659.4 695.1	403.9 418.5 445.8 484.1 509.4 514.8 519.1 527.4 561.6 589.4	6.9 6.5 7.0 8.5 7.8 7.5 9.1 11.0 14.3	43.6 46.3 52.7 57.0 63.3 66.8 71.9 75.0 87.2 91.8	244.4 255.5 273.9 281.7 284.6 287.3 296.6 294.9 316.4 331.4	212.4 224.2 239.7 247.1 250.2 251.0 257.5 255.2 273.5 286.9	10.4 9.8 11.8 11.9 9.9 8.3 8.8 9.8 9.9	21.5 21.6 22.7 23.0 24.6 28.0 30.3 29.9 33.2 33.4	1,400.1 1,452.3 1,500.6 1,499.7 1,497.1 1,493.6 1,507.2 1,536.7 1,543.7 1,542.8	1,133.7 1,172.6 1,211.3 1,207.5 1,207.4 1,212.0 1,220.7 1,242.6 1,251.5 1,249.4	222.2 234.8 244.2 245.5 241.3 230.8 231.4 236.9 234.6 237.0	44.3 45.3 45.8 47.2 48.6 50.8 55.2 57.4 58.0 56.0
2006:            	2,397.1 2,399.1 2,402.7 2,409.4	900.5 892.8 892.0 894.4	595.6 597.2 594.3 606.5	519.2 515.9 516.7 524.5	7.1 7.5 7.2 8.0	69.3 73.9 70.4 74.1	305.0 295.7 297.7 287.8	264.4 257.3 259.0 249.2	8.3 8.7 8.6 9.8	32.4 29.7 30.1 28.8	1,496.6 1,506.3 1,510.8 1,515.0	1,214.1 1,216.5 1,222.3 1,230.0	228.9 234.9 232.8 229.1	53.7 54.8 55.8 56.3
2007:                  V	2,409.5 2,435.4 2,458.9 2,468.7	882.8 898.7 919.0 925.1	594.7 607.1 621.7 622.4	514.6 522.2 535.9 536.7	8.4 9.6 9.2 9.4	71.6 75.4 76.8 76.4	288.1 291.6 297.2 302.7	249.7 252.1 256.8 262.2	9.3 9.7 10.3 9.8	29.0 29.8 30.1 30.6	1,526.5 1,536.5 1,540.0 1,543.7	1,235.6 1,242.3 1,245.1 1,247.4	234.3 237.2 237.6 238.4	56.8 57.2 57.6 58.1
2008:            	2,484.7 2,506.9 2,536.6 2,544.0	943.4 961.3 991.6 1,007.3	634.8 645.6 675.4 681.7	545.4 548.4 574.0 578.7	9.8 10.4 11.1 12.7	79.7 87.4 90.9 90.8	308.6 315.8 315.9 325.4	268.4 273.8 273.3 278.4	8.9 9.4 10.3 10.8	31.4 32.6 32.2 36.5	1,541.9 1,546.6 1,547.0 1,539.3	1,249.6 1,250.1 1,252.5 1,253.6	234.3 238.1 236.8 229.4	58.5 58.7 58.0 57.0
2009:            V P	2,527.2 2,568.6 2,585.5 2,584.4	996.3 1,023.5 1,043.3 1,043.5	672.8 695.2 709.3 703.1	571.5 588.2 599.6 598.2	13.2 13.9 15.9 14.0	88.4 93.5 94.1 91.1	323.4 328.2 333.8 340.4	280.1 284.0 288.3 295.2	10.8 11.0 11.3 11.1	32.3 33.2 34.1 33.9	1,533.3 1,548.0 1,545.5 1,544.3	1,252.3 1,252.7 1,246.6 1,246.1	226.2 239.0 242.2 240.8	55.7 55.7 55.8 56.7

Note: See Table B-2 for data for total government consumption expenditures and gross investment for 1960-94.

TABLE B-22. Private inventories and domestic final sales by industry, 1960-2009

[Billions of dollars, except as noted; seasonally adjusted]

				Private in	ventories <sup>1</sup>				Final	Ratio of invent	private tories
Quarter	Total <sup>2</sup>	Farm	Mining, utilities, and	Manufac-	Wholesale	Retail	Other indus-	Non-	sales of domestic busi-	to final s domestic	sales of
			construc- tion <sup>2</sup>	turing	trade	trade	tries <sup>2</sup>	farm <sup>2</sup>	busi- ness <sup>3</sup>	Total	Non- farm
Fourth quarter: 1960	136.4	42.9		48.7	16.9	21.9	6.1	93.5	32.3	4.22	2.89
1961 1962	139.8 147.4	44.6 47.0		50.1 53.2	17.3 18.0	21.3 22.7	6.6 6.6	95.2 100.5	32.3 33.9 35.6	4.12 4.14	2.81 2.82
1963	149.9	44.4		55.1	19.5	23.9	7.1	105.5	37.9	3.95	2.78 2.75 2.72
1964 1965	154.5 169.4	42.2 47.2		58.6 63.4	20.8 22.5	25.2 28.0	7.7 8.3	112.2 122.2	40.8 44.9	3.79 3.77	2.75
1966 1967	185.6 194.8	47.3 45.7		73.0 79.9	25.8 28.1	30.6 30.9	8.9 10.1	138.3 149.1	47.4 49.9	3.92 3.90	2.92 2.99 2.90
1968	208.1	48.8		85.1	29.3	34.2	10.6	159.3	55.0	3.79	2.90
1969	227.4	52.8 52.4		92.6	32.5	37.5	12.0	174.6	58.7	3.88	2.98
1970 1971	235.7 253.7	59.3		95.5 96.6	36.4 39.4	38.5 44.7	12.9 13.7	183.3 194.4	61.9 67.5	3.81 3.76	2.96 2.88
1972 1973	283.6 351.5	73.7 102.2		102.1 121.5	43.1 51.7	49.8 58.4	14.8 17.7	209.9 249.4	75.7 83.7	3.74 4.20	2.77 2.98
19/4	405.6	87.6		162.6	66.9	63.9	24.7	318.1	89.8	4.52	3.54 3.16
1975 1976	408.5 439.6	89.5 85.3		162.2 178.7	66.5 74.1	64.4 73.0	25.9 28.5	319.0 354.2	101.1 111.2	4.04 3.95	3.19
1977 1978	482.0 570.9	90.6 119.3		193.2 219.8	84.0 99.0	80.9 94.1	33.3 38.8	391.4 451.7	124.0 143.6	3.89 3.98	3.16 3.15
1979	667.6	134.9		261.8	119.5	104.7	46.6	532.6	159.4	4.19	3.34
1980	739.0 779.1	140.3 127.4		293.4	139.4 148.8	111.7 123.2	54.1	598.7 651.7	174.1	4.24 4.17	3.44 3.49 3.30
1981 1982	773.9	131.3		313.1 304.6	147.9	123.2	66.6 66.8	642.6	186.7 194.8	3.97	3.49
1983 1984	796.9 869.0	131.7 131.4		308.9 344.5	153.4 169.1	137.6 157.0	65.2 66.9	665.1 737.6	215.7 233.6	3.69 3.72	3.08 3.16
1985	875.9	125.8		333.3	175.9	171.4	69.5	750.2	249.5	3.51	3 01
1986 1987	858.0 924.2	113.0 119.9		320.6 339.6	182.0 195.8	176.2 199.1	66.3 69.9	745.1 804.4	264.2 277.7	3.25 3.33	2.82 2.90 2.86
1988 1989	999.7 1,044.3	130.7 129.6		372.4 390.5	213.9 222.8	213.2 231.4	69.5 70.1	869.1 914.7	304.1 322.8	3.29 3.23	2.86 2.83
1990	1,082.0	133.1		404.5	236.8	236.6	71.0	948.9	335.9	3.22	2.82
1991 1992	1,057.2 1,082.6	123.2 133.1		384.1 377.6	239.2 248.3	240.2 249.4	70.5 74.3	934.0 949.5	345.7 370.9	3.06 2.92	2.70 2.56 2.51 2.56
1993	1,116.0	132.3		380.1	258.6	268.6	76.5	983.7	391.4	2.85	2.51
1994 1995	1,194.5 1,257.2	134.5 131.1		404.3 424.5	281.5 303.7	293.6 312.2	80.6 85.6	1,060.0 1,126.1	413.9 436.0	2.89 2.88	2.5b 2.58
NAICS: 1996	1,284.7	136.6	31.1	421.0	285.1	328.7	82.1	1,148.1	465.6	2.76	2.47
1997	1,327.3 1,341.6	136.9	33.0	432.0	302.5	335.9	87.1	1,190.4	492.2	2.70 2.70 2.55	2.42 2.32
1998 1999	1,341.6	120.5 124.3	36.6 38.5	432.3 457.6	312.0 334.8	349.2 377.7	91.1 99.8	1,221.1	525.8 557.2	2.55	2.32
2000	1.524.0	132.1	42.3	476.5	357.7	400.8	114.6	1.391.8	588.3	2.59	2 37
2001 2002	1,447.3 1,489.1	126.2 135.9	45.3 46.5	440.9 443.7	335.8 343.2	386.0 408.0	113.0 111.8	1,321.1 1,353.2	603.0 608.5	2.40 2.45	2.19 2.22
2003	1,545.7 1,681.5	151.0 157.2	54.7 64.1	447.6 487.2	352.6 388.9	425.5 460.9	114.3 123.2	1,394.7 1,524.3	646.3 685.2	2.39 2.45	2.16 2.22
2004 2005	1,804.6	165.2	81.7	531.5	422.8	473.7	123.2	1,639.4	728.7	2.43	2.22
2006:	1,820.2	158.4	79.2	543.4	430.3	478.0	130.8	1,661.8	745.2	2.44	2.23
 	1,861.7 1,896.9	157.6 165.3	81.5 86.3	561.5 571.4	444.3 450.0	483.0 487.8	133.9 136.2	1,704.2 1,731.6	753.7 758.7	2.47 2.50	2.26 2.28 2.27
IV	1,917.1	165.1	90.7	575.7	456.4	491.6	137.7	1,752.0	771.9	2.48	
2007: I II	1,951.8 1,972.6	177.4 175.1	94.5 98.1	581.9 590.7	463.7 468.2	494.1 498.0	140.2 142.5	1,774.5 1,797.5	784.3 795.0	2.49 2.48	2.26 2.26
III IV	2,003.9 2,070.6	183.3 188.4	94.4 95.3	599.0 625.3	477.3 499.9	506.1 513.6	143.8 148.2	1,820.6 1,882.2	804.7 813.7	2.49 2.54	2.26 2.26 2.31
2008: I	2.124.9	195.8	102.9	646.1	514.2	514.3	151.6	1,929.1	810.9	2.54	2.38
 	2,199.7 2,177.8	210.0 200.9	114.5 114.6	673.3 655.3	531.0	516.4 520.7	154.6	1,989.8 1,976.9	818.3 814.4	2.69 2.67	2.43 2.43 2.30
IV	2,015.9	178.4	100.1	592.8	528.2 482.7	506.4	158.2 155.5	1,837.5	800.0	2.52	2.43
2009:	1,948.1 1,912.2	171.9 171.6	96.4 96.8	575.8 567.4	464.3 449.6	489.7 478.5	150.0 148.3	1,776.1	794.1 792.5	2.45 2.41	2.24 2.20
	1,892.3	168.6	97.7	564.3	436.6	477.1	147.9	1,740.6 1,723.7	795.3	2.38	2.17
IV p	1,914.2	167.0	98.1	570.0	445.6	484.5	148.9	1,747.2	801.3	2.39	2.18

<sup>&</sup>lt;sup>1</sup> Inventories at end of quarter. Quarter-to-quarter change calculated from this table is not the current-dollar change in private inventories component of gross domestic product (GDP). The former is the difference between two inventory stocks, each valued at its respective end-of-quarter prices. The latter is the change in the physical volume of inventories valued at average prices of the quarter. In addition, changes calculated from this table are at quarterly rates, whereas change in private inventories is stated at annual rates.

<sup>2</sup> Inventories of construction, mining, and utilities establishments are included in other industries through 1995.
3 Quarterly totals at monthly rates. Final sales of domestic business equals final sales of domestic product less gross output of general government, gross value added of nonprofit institutions, compensation paid to domestic workers, and space rent for owner-occupied housing. Includes a small amount of final sales by farm and by government enterprises.

Note: The industry classification of inventories is on an establishment basis. Estimates through 1995 are based on the Standard Industrial Classification (SIC). Beginning with 1996, estimates are based on the North American Industry Classification System (NAICS).

Source: Department of Commerce (Bureau of Economic Analysis).

Table B-23. Real private inventories and domestic final sales by industry, 1960-2009

[Billions of chained (2005) dollars, except as noted; seasonally adjusted]

			JIIS OI CIIdiii	,,	Final	Ratio of	f private tories				
Quarter	Total <sup>2</sup>	Farm	Mining, utilities, and	Manufac- turing	Wholesale trade	Retail trade	Other indus-	Non- farm <sup>2</sup>	sales of domestic busi-	to final	sales of business
			construc- tion <sup>2</sup>	turing	tiduc	tiduc	tries <sup>2</sup>	idilli	ness 3	Total	Non- farm
Fourth quarter: 1960	487.9 498.5 520.4 540.6 557.9 590.8 637.9 671.8 702.6 732.9	133.3 135.8 137.6 139.0 135.1 137.7 136.3 138.8 142.9 142.9		164.7 169.6 180.9 187.8 198.2 212.2 240.6 259.6 271.5 284.1	66.5 68.4 71.6 77.5 82.2 87.8 99.5 107.7 111.5	69.5 68.2 73.0 77.0 81.1 89.3 96.6 96.6 104.8 112.1	35.8 39.5 39.4 42.1 44.7 46.6 47.9 53.5 55.1	338.3 346.1 366.5 385.5 407.3 437.8 487.9 519.5 545.9 576.8	144.8 151.2 157.0 166.3 176.4 191.6 195.7 200.6 211.5 215.8 218.4	3.37 3.30 3.31 3.25 3.16 3.08 3.26 3.35 3.32 3.40	2.34 2.29 2.33 2.32 2.31 2.29 2.49 2.59 2.58
1970 1971 1972 1973 1974 1975 1976 1977 1978	738.5 763.5 789.1 828.1 857.2 844.4 878.7 921.8 967.4 995.4	144.6 145.0 146.8 142.4 148.2 146.6 153.9 155.9 160.2		284.0 280.6 288.3 309.6 333.0 324.6 340.1 349.6 365.6 379.7	128.7 135.5 141.6 145.4 158.9 152.1 162.2 175.3 189.3 198.7	112.2 127.4 137.3 148.4 146.2 138.8 149.5 158.1 168.7 168.6	58.6 60.7 63.7 67.0 71.4 73.3 74.0 79.6 84.4 84.3	585.5 606.1 632.8 673.3 712.3 690.9 728.5 764.2 809.1 832.8	229.6 248.7 257.4 247.8 259.6 272.4 286.7 308.2 315.4	3.38 3.33 3.17 3.22 3.46 3.25 3.23 3.21 3.14 3.16	2.68 2.64 2.54 2.62 2.87 2.66 2.67 2.67 2.63 2.64
1980 1981 1982 1983 1984 1985 1986 1986 1987	986.0 1,025.0 1,005.3 997.7 1,075.9 1,101.3 1,109.8 1,143.0 1,164.9 1,195.6	153.0 163.1 170.6 153.1 159.4 166.5 164.2 155.1 142.0		380.1 385.2 367.9 367.5 399.4 392.4 388.3 397.6 416.2 431.8	204.0 209.8 207.2 206.3 222.8 229.2 237.7 245.4 254.9 258.5	163.8 172.8 168.9 182.7 205.0 220.8 224.3 246.1 253.9 268.8	82.9 92.3 89.4 88.3 89.7 94.8 98.3 100.8 99.3 94.8	832.4 860.6 833.3 844.0 916.3 934.7 945.1 986.2 1,021.6 1,052.4	315.1 312.8 311.6 335.2 353.5 369.9 383.8 394.3 414.7 426.9	3.13 3.28 3.23 2.98 3.04 2.98 2.89 2.90 2.81 2.80	2.64 2.75 2.67 2.52 2.59 2.53 2.46 2.50 2.46 2.47
1990 1991 1992 1993 1994 1995 NAICS:	1,212.1 1,210.7 1,228.6 1,250.8 1,320.1 1,352.2	148.6 146.7 153.8 146.3 160.0 147.0		441.6 434.2 429.0 432.9 446.3 461.7	267.2 271.5 280.3 286.5 302.7 316.2	267.2 267.7 272.5 288.3 309.4 321.9	91.2 94.8 97.7 101.2 106.1 108.6	1,066.4 1,066.8 1,077.7 1,107.6 1,163.4 1,207.7	428.2 428.0 451.1 466.9 485.5 503.4	2.83 2.83 2.72 2.68 2.72 2.69	2.49 2.49 2.39 2.37 2.40 2.40
1996 1997 1998	1,383.4 1,460.8 1,532.4 1,600.9	155.3 159.0 160.6 156.9	47.6 50.1 59.1 57.1	465.7 490.0 507.6 523.8	298.0 324.9 348.6 369.7	335.3 349.5 364.7 390.5	87.6 93.2 99.0 106.6	1,230.9 1,304.4 1,373.9 1,444.7	529.2 551.4 586.2 616.4	2.61 2.65 2.61 2.60	2.33 2.37 2.34 2.34
2000 2001 2002 2003 2004 2005	1,661.1 1,619.4 1,632.1 1,649.5 1,715.8 1,765.8	155.2 155.3 152.2 152.4 160.3 160.4	54.3 65.1 61.0 68.2 69.6 73.4	531.9 505.7 500.5 492.0 498.0 519.0	390.4 376.8 376.7 376.3 396.8 415.0	411.1 400.5 424.2 441.5 465.2 469.8	119.3 119.1 118.0 119.6 126.0 128.3	1,505.9 1,464.4 1,480.0 1,497.2 1,555.6 1,605.4	638.7 645.1 645.5 676.7 698.6 719.8	2.60 2.51 2.53 2.44 2.46 2.45	2.36 2.27 2.29 2.21 2.23 2.23
2006: I II III IV	1,782.2 1,800.4 1,817.2 1,825.2	161.3 159.3 157.7 156.7	75.8 81.0 85.9 90.3	523.7 529.5 534.3 536.0	419.5 424.5 428.7 428.3	472.7 474.8 478.3 480.6	129.0 130.7 131.9 132.9	1,621.0 1,641.1 1,659.5 1,668.6	732.7 736.1 735.9 746.3	2.43 2.45 2.47 2.45	2.21 2.23 2.26 2.24
2007:            	1,828.8 1,834.6 1,842.1 1,844.7	158.2 157.1 156.4 155.9	92.0 93.4 91.7 89.9	535.2 537.2 539.1 541.0	429.0 429.5 432.3 434.7	479.7 481.9 486.9 486.4	134.2 135.2 135.5 136.4	1,670.7 1,677.7 1,685.8 1,689.0	751.2 757.1 764.0 770.4	2.43 2.42 2.41 2.39	2.22 2.22 2.21 2.19
2008: I II IV	1,844.8 1,835.5 1,828.1 1,818.8	152.8 152.4 151.1 150.7	90.5 91.1 90.3 87.5	548.6 542.8 535.1 537.1	433.2 432.8 433.8 429.6	482.1 478.6 480.0 474.6	137.1 137.2 137.6 138.9	1,692.6 1,683.6 1,677.5 1,668.6	766.5 772.4 760.7 746.0	2.41 2.38 2.40 2.44	2.21 2.18 2.21 2.24
2009: I II IV <sup>p</sup>	1,790.3 1,750.2 1,715.4 1,707.1	150.7 151.3 151.8 150.2	89.2 91.1 92.1 89.0	529.9 520.0 506.2 503.3	419.0 400.8 384.1 383.5	462.8 450.0 445.7 446.1	138.1 136.6 135.6 134.8	1,639.8 1,599.1 1,563.7 1,556.9	734.7 734.3 737.2 742.4	2.44 2.38 2.33 2.30	2.23 2.18 2.12 2.10

Inventories at end of quarter. Quarter-to-quarter changes calculated from this table are at quarterly rates, whereas the change in private inventories component of gross domestic product (GDP) is stated at annual rates.

 Inventories of construction, mining, and utilities establishments are included in other industries through 1995.

 Quarterly totals at monthly rates. Final sales of domestic business equals final sales of domestic product less gross output of general government, gross value added of nonprofit institutions, compensation paid to domestic workers, and space rent for owner-occupied housing. Includes a small amount of final sales by farm and by government enterprises.

Note: The industry classification of inventories is on an establishment basis. Estimates through 1995 are based on the Standard Industrial Classification

<sup>(</sup>SIC), Beginning with 1996, estimates are based on the North American Industry Classification System (NAICS). See Survey of Current Business, Tables 5.7.6A and 5.7.6B, for detailed information on calculation of the chained (2005) dollar inventory series.

TABLE B-24. Foreign transactions in the national income and product accounts, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Curre	ent receip	ts from re			,		isonany a		ayments		the world	ı		
		Ехр	orts of go nd service	ods es	In-			orts of go nd service		In-	to	Current t transfer prest of the		et)	Balance
Year or quarter	Total	Total	Goods 1	Serv- ices <sup>1</sup>	come re- ceipts	Total	Total	Goods <sup>1</sup>	Serv- ices <sup>1</sup>	come pay- ments	Total	From per- sons (net)	From gov- ern- ment (net)	From busi- ness (net)	on current account, NIPA <sup>2</sup>
1960 1961 1962 1963 1964 1965 1966 1967 1967 1968	31.9 32.9 35.0 37.6 42.3 45.0 49.0 52.1 58.0 63.7	27.0 27.6 29.1 31.1 35.0 37.1 40.9 43.5 47.9 51.9	20.5 20.9 21.7 23.3 26.7 27.8 30.7 32.2 35.3 38.3	6.6 6.7 7.4 7.7 8.3 9.4 10.2 11.3 12.6 13.7	4.9 5.3 5.9 6.5 7.2 7.9 8.1 8.7 10.1	28.8 28.7 31.2 32.7 34.8 38.9 45.2 48.7 56.5 62.1	22.8 22.7 25.0 26.1 28.1 31.5 37.1 39.9 46.6 50.5	15.2 15.1 16.9 17.7 19.4 22.2 26.3 27.8 33.9 36.8	7.6 7.6 8.1 8.4 8.7 9.3 10.7 12.2 12.6 13.7	1.8 1.8 1.8 2.1 2.3 2.6 3.0 3.3 4.0 5.7	4.1 4.2 4.4 4.5 4.4 4.7 5.1 5.5 5.9	0.5 .5 .6 .7 .7 .8 .8 1.0 1.0	3.6 3.7 3.7 3.5 3.8 4.1 4.2 4.6 4.5	0.1 .1 .1 .2 .2 .2 .2 .3	3.2 4.2 3.8 4.9 7.5 6.2 3.8 3.5 1.5
1970 1971 1972 1972 1973 1974 1975 1976 1977 1978	72.5 77.0 87.1 118.8 156.5 166.7 181.9 196.6 233.1 298.5	59.7 63.0 70.8 95.3 126.7 138.7 149.5 159.4 186.9 230.1	44.5 45.6 51.8 73.9 101.0 109.6 117.8 123.7 145.4 184.0	15.2 17.4 19.0 21.3 25.7 29.1 31.7 35.7 41.5 46.1	12.8 14.0 16.3 23.5 29.8 28.0 32.4 37.2 46.3 68.3	68.8 76.7 91.2 109.9 150.5 146.9 174.8 207.5 245.8 299.6	55.8 62.3 74.2 91.2 127.5 122.7 151.1 182.4 212.3 252.7	40.9 46.6 56.9 71.8 104.5 99.0 124.6 152.6 177.4 212.8	14.9 15.8 17.3 19.3 22.9 23.7 26.5 29.8 34.8 39.9	6.4 7.7 10.9 14.3 15.0 15.5 16.9 24.7 36.4	6.6 7.9 9.2 7.9 8.7 9.1 8.1 8.8 10.6	1.3 1.4 1.6 1.4 1.3 1.4 1.4 1.6	4.9 6.1 7.4 5.6 6.4 7.1 5.7 5.3 5.9 6.8	.4 .5 .7 1.0 .7 1.1 1.4 2.0	3.7 .3 -4.0 8.9 6.0 19.8 7.1 -10.9 -12.6 -1.2
1980 1981 1982 1982 1983 1984 1985 1986 1987 1988	359.9 397.3 384.2 378.9 424.2 414.5 431.3 486.6 595.5 680.3	280.8 305.2 283.2 277.0 302.4 302.0 320.3 363.8 443.9 503.1	225.8 239.1 215.0 207.3 225.6 222.2 226.0 257.5 325.8 369.4	55.0 66.1 68.2 69.7 76.7 79.8 94.3 106.2 118.1 133.8	79.1 92.0 101.0 101.9 121.9 112.4 111.0 122.8 151.6 177.2	351.4 393.9 387.5 413.9 514.3 528.8 574.0 640.7 711.2 772.7	293.8 317.8 303.2 328.6 405.1 417.2 452.9 508.7 554.0 591.0	248.6 267.8 250.5 272.7 336.3 343.3 370.0 414.8 452.1 484.8	45.3 49.9 52.6 56.0 68.8 73.9 82.9 93.9 101.9 106.2	44.9 59.1 64.5 64.8 85.6 85.9 93.4 105.2 128.3 151.2	12.6 17.0 19.8 20.5 23.6 25.7 27.8 26.8 29.0 30.4	2.0 5.6 6.7 7.0 7.9 8.3 9.1 10.0 10.8 11.6	8.3 9.7 10.1 12.2 14.4 15.4 13.4 13.7 14.2	2.4 3.2 3.4 3.5 2.9 3.2 3.4 4.5	8.5 3.4 -3.3 -35.1 -90.1 -114.3 -142.7 -154.1 -115.7 -92.4
1990 1991 1992 1992 1993 1994 1995 1996 1997 1998	740.6 764.7 786.8 810.8 904.8 1,041.1 1,113.5 1,233.9 1,240.1 1,308.8	552.1 596.6 635.0 655.6 720.7 811.9 867.7 954.4 953.9 989.3	396.6 423.6 448.0 459.9 510.1 583.3 618.3 687.7 680.9 697.2	155.5 173.0 187.0 195.7 210.6 228.6 249.3 266.7 273.0 292.1	188.5 168.1 151.8 155.2 184.1 229.3 245.8 279.5 286.2 319.5	815.6 756.9 832.4 889.4 1,019.5 1,146.2 1,227.6 1,363.3 1,444.6 1,600.7	629.7 623.5 667.8 720.0 813.4 902.6 964.0 1,055.8 1,115.7 1,251.4	508.1 500.7 544.9 592.8 676.8 757.4 807.4 885.7 930.8 1,047.7	121.7 122.8 122.9 127.2 136.6 145.1 156.5 170.1 184.9 203.7	154.1 138.2 122.7 124.0 160.0 199.6 214.2 256.1 268.9 291.7	31.7 -4.9 41.9 45.4 46.1 44.1 49.5 51.4 60.0 57.6	12.2 14.1 14.5 17.1 18.9 20.3 22.6 25.7 29.7 32.2	14.7 -24.0 22.0 22.9 21.1 15.6 20.0 16.7 17.4 18.0	4.8 5.0 5.4 6.0 8.2 6.9 9.1 13.0 7.4	-74.9 7.9 7.86 -78.6 -114.7 -105.1 -114.1 -129.3 -204.5 -291.9
2000	1,473.7 1,350.8 1,316.5 1,394.4 1,628.8 1,878.1 2,192.1 2,517.7 2,640.3	1,093.2 1,027.7 1,003.0 1,041.0 1,180.2 1,305.1 1,471.0 1,655.9 1,831.1 1,560.0	784.3 731.2 700.3 726.8 817.0 906.1 1,024.4 1,139.4 1,266.9 1,035.1	308.9 296.5 302.7 314.2 363.2 399.0 446.6 516.5 564.2 524.9	380.5 323.0 313.5 353.3 448.6 573.0 721.1 861.8 809.2	1,884.1 1,742.4 1,768.1 1,910.5 2,253.4 2,618.6 2,990.5 3,242.4 3,347.6	1,475.3 1,398.7 1,430.2 1,545.1 1,798.9 2,027.8 2,240.3 2,369.7 2,538.9 1,950.1	1,246.5 1,171.7 1,193.9 1,289.3 1,501.7 1,708.0 1,884.9 1,987.7 2,126.4 1,569.8	228.8 227.0 236.3 255.9 297.3 319.8 355.4 382.1 412.4 380.4	342.8 271.1 264.4 284.6 357.4 475.9 648.6 746.0 667.3	66.1 72.6 73.5 80.7 97.1 115.0 101.5 126.6 141.4 142.6	34.6 38.1 40.6 41.2 43.6 48.4 51.6 58.7 64.5 62.7	20.0 16.2 21.6 25.8 27.2 35.3 28.8 36.5 40.8 50.5	11.4 18.3 11.3 13.7 26.3 31.3 21.1 31.4 36.2 29.5	-410.4 -391.6 -451.6 -516.1 -624.6 -740.5 -798.4 -724.7 -707.2
2006:         	2,073.0 2,172.4 2,217.6 2,305.3	1,414.0 1,456.0 1,476.0 1,538.2	985.1 1,016.5 1,030.6 1,065.4	428.9 439.6 445.3 472.8	659.0 716.4 741.6 767.2	2,862.6 2,983.5 3,070.9 3,045.0	2,189.8 2,237.4 2,281.7 2,252.5	1,842.9 1,884.3 1,925.0 1,887.5	346.9 353.1 356.6 365.0	578.5 640.9 679.7 695.5	94.3 105.1 109.5 97.1	46.8 52.2 52.7 54.8	26.9 33.6 34.6 20.1	20.6 19.4 22.3 22.2	-789.6 -811.0 -853.3 -739.7
2007:         	2,352.8 2,454.2 2,582.8 2,681.0	1,564.9 1,602.1 1,685.2 1,771.6	1,081.4 1,109.4 1,156.6 1,210.4	483.4 492.7 528.6 561.2	787.9 852.1 897.6 909.4	3,152.2 3,216.8 3,267.6 3,332.9	2,294.3 2,326.9 2,383.6 2,474.0	1,926.9 1,951.1 1,993.8 2,078.9	367.4 375.8 389.8 395.2	724.0 776.0 759.1 725.1	133.9 113.9 124.8 133.8	57.8 57.9 58.7 60.4	46.2 26.1 32.4 41.2	29.9 29.9 33.7 32.1	-799.3 -762.6 -684.8 -651.9
2008:            	2,660.0 2,742.0 2,738.6 2,420.7	1,803.6 1,901.5 1,913.1 1,706.2	1,247.3 1,326.2 1,338.5 1,155.7	556.3 575.3 574.6 550.5	856.3 840.5 825.6 714.4	3,377.4 3,495.3 3,475.8 3,041.7	2,548.1 2,640.2 2,670.5 2,296.7	2,143.1 2,226.8 2,243.3 1,892.5	404.9 413.4 427.2 404.2	685.3 711.6 664.8 607.4	144.0 143.6 140.4 137.5	63.1 66.2 66.7 61.8	43.8 43.0 37.2 39.1	37.1 34.4 36.5 36.6	-717.4 -753.3 -737.1 -621.0
2009:                     P	2,089.0 2,065.0 2,164.4	1,509.3 1,493.7 1,573.8 1,663.4	989.5 978.1 1,045.2 1,127.6	519.8 515.6 528.5 535.8	579.6 571.3 590.6	2,498.5 2,454.5 2,589.8	1,887.9 1,832.8 1,976.0 2,103.9	1,508.2 1,461.1 1,592.8 1,716.9	379.6 371.7 383.1 387.0	479.7 478.6 469.1	130.9 143.0 144.8 131.5	63.8 63.1 61.9 61.9	35.9 50.4 54.0 41.5	31.2 29.6 28.9 28.1	-409.5 -389.5 -425.5

<sup>&</sup>lt;sup>1</sup> Certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment were reclassified from goods to services.

<sup>2</sup> National income and product accounts (NIPA).

Source: Department of Commerce (Bureau of Economic Analysis).

TABLE B-25. Real exports and imports of goods and services, 1995-2009

[Billions of chained (2005) dollars; quarterly data at seasonally adjusted annual rates]

		Exports	of goods and :	services			Imports	of goods and	services	
			Goods <sup>1</sup>					Goods <sup>1</sup>		
Year or quarter	Total	Total	Durable goods	Non- durable goods	Services <sup>1</sup>	Total	Total	Durable goods	Non- durable goods	Services <sup>1</sup>
1995 1996 1997 1998	845.7 916.0 1,025.1 1,048.5 1,094.3	575.4 626.2 716.2 732.2 760.0	363.6 405.4 478.7 494.2 517.8	216.2 223.4 237.9 237.6 240.8	272.6 291.7 308.9 316.4 334.6	944.5 1,026.7 1,165.0 1,301.1 1,450.9	766.1 837.9 958.7 1,072.3 1,206.0	422.9 468.1 545.4 617.2 707.1	360.0 384.1 424.1 462.9 500.2	180.9 190.3 206.9 229.4 244.9
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 p	1,188.3 1,121.6 1,099.2 1,116.8 1,222.8 1,305.1 1,422.0 1,546.1 1,629.3 1,468.6	844.3 792.0 763.5 777.2 842.9 906.1 1,064.8 1,127.5 987.0	584.6 535.9 505.6 514.5 571.0 624.9 691.9 749.1 784.0 650.9	256.5 255.2 259.1 263.8 272.2 281.2 299.6 316.1 342.7 331.6	343.5 329.3 335.6 339.6 380.0 430.6 481.3 501.7 480.6	1,639.9 1,593.8 1,648.0 1,720.7 1,910.8 2,027.8 2,151.2 2,193.8 2,123.5 1,822.5	1,367.9 1,324.2 1,373.4 1,440.9 1,599.7 1,708.0 1,808.8 1,839.6 1,767.3 1,479.1	814.8 764.5 796.5 830.6 945.0 1,025.4 1,115.3 1,139.8 1,089.2 858.8	549.2 564.2 580.2 615.2 655.8 682.6 694.5 701.4 678.5 612.5	271.7 269.6 274.5 279.8 311.0 319.8 342.4 354.2 356.5 342.9
2006:                  V	1,388.8 1,412.1 1,414.1 1,473.2	970.3 987.8 988.3 1,019.2	678.3 688.2 688.4 712.7	292.1 299.7 299.9 306.7	418.5 424.3 425.8 453.9	2,121.3 2,144.9 2,170.5 2,168.1	1,782.7 1,804.7 1,829.3 1,818.6	1,103.2 1,109.0 1,116.8 1,132.3	681.2 696.7 712.6 687.6	338.6 340.1 341.3 349.5
2007:            	1,485.9 1,504.8 1,569.9 1,624.0	1,026.7 1,042.4 1,078.9 1,111.0	721.5 732.0 758.4 784.6	305.6 310.7 320.9 327.2	459.2 462.3 490.9 512.9	2,190.8 2,188.1 2,208.3 2,188.0	1,841.1 1,836.5 1,849.4 1,831.6	1,141.5 1,127.8 1,144.3 1,145.5	700.6 709.0 706.4 689.6	349.8 351.6 359.0 356.4
2008:                  V	1,623.4 1,670.4 1,655.2 1,568.0	1,122.4 1,159.9 1,154.8 1,072.9	783.3 808.3 807.0 737.4	338.6 351.0 347.8 333.3	501.1 510.5 500.4 494.9	2,174.3 2,146.5 2,134.4 2,038.9	1,815.4 1,794.0 1,777.1 1,682.6	1,132.0 1,122.3 1,097.6 1,004.7	686.7 676.4 680.2 670.7	359.0 352.5 357.7 356.9
2009:                  <i>P</i>	1,434.5 1,419.5 1,478.8 1,541.6	956.1 940.7 993.9 1,057.4	637.3 611.4 651.8 702.9	314.9 324.0 337.2 350.2	477.2 477.4 483.9 484.0	1,821.0 1,749.8 1,836.2 1,882.7	1,474.4 1,409.4 1,490.6 1,541.9	835.3 798.1 863.5 938.3	629.4 602.1 618.4 600.0	346.2 339.5 345.3 340.7

<sup>&</sup>lt;sup>1</sup> Certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment were reclassified from goods to services.

Note: See Table B-2 for data for total exports of goods and services and total imports of goods and services for 1960-94. Source: Department of Commerce (Bureau of Economic Analysis).

Table B–26. Relation of gross domestic product, gross national product, net national product, and national income, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

				4		.,,		,		
Year or quarter	Gross domestic product	Plus: Income receipts from rest of the world	Less: Income payments to rest of the world	Equals: Gross national product	Less: Cons Total	sumption of fix Private	Govern- ment	Equals: Net national product	Less: Statistical discrep- ancy	Equals: National income
1960 1961 1962 1963 1964 1965 1966 1967 1967	526.4 544.8 585.7 617.8 663.6 719.1 787.7 832.4 909.8 984.4	4.9 5.3 5.9 6.5 7.2 7.9 8.1 8.7 10.1	1.8 1.8 2.1 2.3 2.6 3.0 3.3 4.0 5.7	529.6 548.3 589.7 622.2 668.6 724.4 792.8 837.8 915.9 990.5	56.6 58.2 60.6 63.3 66.4 70.7 76.5 82.9 90.4 99.2	41.6 42.6 44.1 45.9 48.3 51.9 56.5 61.6 67.4 74.5	15.0 15.6 16.5 17.5 18.1 18.9 20.0 21.4 23.0 24.7	473.0 490.1 529.2 558.9 602.2 653.7 716.3 754.9 825.5 891.4	-1.0 6 .3 8 .8 1.5 6.2 4.5 4.3 2.9	473.9 490.7 528.9 559.7 601.4 652.2 710.1 750.4 821.2 888.5
1970 1971 1972 1973 1974 1975 1976 1977 1977	1,038.3 1,126.8 1,237.9 1,382.3 1,499.5 1,637.7 1,824.6 2,030.1 2,293.8 2,562.2	12.8 14.0 16.3 23.5 29.8 28.0 32.4 37.2 46.3 68.3	6.4 6.4 7.7 10.9 14.3 15.0 15.5 16.9 24.7 36.4	1,044.7 1,134.4 1,246.4 1,394.9 1,515.0 1,650.7 1,841.4 2,050.4 2,315.3 2,594.2	108.3 117.8 127.2 140.8 163.7 190.4 208.2 231.8 261.4 298.9	81.7 89.5 97.7 109.5 127.8 150.4 165.5 186.1 212.0 244.5	26.6 28.2 29.4 31.3 35.9 42.6 45.6 49.5 54.4	936.4 1,016.6 1,119.3 1,254.1 1,351.3 1,460.3 1,633.3 1,818.6 2,053.9 2,295.3	6.9 11.0 8.9 8.0 9.8 16.3 23.5 21.2 26.1 47.0	929.5 1,005.6 1,110.3 1,246.1 1,341.5 1,609.8 1,797.4 2,027.9 2,248.3
1980 1981 1982 1983 1984 1985 1986 1987 1988	2,788.1 3,126.8 3,253.2 3,534.6 3,930.9 4,217.5 4,460.1 4,736.4 5,100.4 5,482.1	79.1 92.0 101.0 101.9 121.9 112.4 111.0 122.8 151.6 177.2	44.9 59.1 64.5 64.8 85.6 85.9 93.4 105.2	2,822.3 3,159.8 3,289.7 3,571.7 3,967.2 4,244.0 4,477.7 4,754.0 5,123.8 5,508.1	344.1 393.3 433.5 451.1 474.3 505.4 538.5 571.1 611.0 651.5	282.3 323.2 356.4 369.5 387.5 412.8 439.1 464.5 497.1 529.6	61.8 70.1 77.1 81.6 86.9 92.7 99.4 106.6 113.9 121.8	2,478.2 2,766.4 2,856.2 3,120.6 3,492.8 3,738.6 3,939.2 4,182.9 4,512.8 4,856.6	45.3 36.6 4.8 49.7 31.5 42.3 67.7 32.9 -9.5 56.1	2,433.0 2,729.8 2,851.4 3,070.9 3,461.3 3,696.3 3,871.5 4,150.0 4,522.3 4,800.5
1990 1991 1992 1993 1994 1995 1996 1997 1998	5,800.5 5,992.1 6,342.3 6,667.4 7,085.2 7,414.7 7,838.5 8,332.4 8,793.5 9,353.5	188.5 168.1 151.8 155.2 184.1 229.3 245.8 279.5 286.2 319.5	154.1 138.2 122.7 124.0 160.0 199.6 214.2 256.1 268.9 291.7	5,835.0 6,022.0 6,371.4 6,698.5 7,109.2 7,444.3 7,870.1 8,355.8 8,810.8 9,381.3	691.2 724.4 744.4 778.0 819.2 869.5 912.5 963.8 1,020.5 1.094.4	560.4 585.4 599.9 626.4 661.0 704.6 743.4 789.7 841.6	130.8 138.9 144.5 151.6 158.2 164.8 169.2 174.1 179.0	5,143.7 5,297.6 5,627.1 5,920.5 6,290.1 6,574.9 6,957.6 7,392.0 7,790.3 8,286.9	84.2 79.7 110.0 135.8 108.8 52.5 25.9 -14.0 -85.3 -71.1	5,059.5 5,217.9 5,517.1 5,784.7 6,181.3 6,522.3 6,931.7 7,406.0 7,875.6 8,358.0
2000	9,951.5 10,286.2 10,642.3 11,142.1 11,867.8 12,638.4 13,398.9 14,077.6 14,441.4 14,258.7	380.5 323.0 313.5 353.3 448.6 573.0 721.1 861.8 809.2	342.8 271.1 264.4 284.6 357.4 475.9 648.6 746.0 667.3	9,989.2 10,338.1 10,691.4 11,210.8 11,959.0 12,735.5 13,471.3 14,193.3	1,184.3 1,256.2 1,305.0 1,354.1 1,432.8 1,541.4 1,660.7 1,760.0 1,847.1 1,863.7	986.8 1,051.6 1,094.0 1,135.9 1,200.9 1,290.8 1,391.4 1,469.6 1,536.2 1,538.4	197.5 204.6 210.9 218.1 231.9 250.6 269.3 290.4 310.9 325.3	8,804.9 9,081.9 9,386.4 9,856.8 10,526.2 11,194.2 11,810.7 12,433.3 12,736.2	-134.0 -103.4 -22.1 16.6 -7.8 -79.7 -220.6 -14.8 101.0	8,938.9 9,185.2 9,408.5 9,840.2 10,534.0 11,273.8 12,031.2 12,448.2 12,635.2
2006: I II IV	13,183.5 13,347.8 13,452.9 13,611.5	659.0 716.4 741.6 767.2	578.5 640.9 679.7 695.5	13,264.0 13,423.3 13,514.8 13,683.2	1,618.0 1,648.2 1,675.2 1,701.3	1,357.4 1,381.1 1,403.2 1,423.9	260.6 267.1 272.0 277.4	11,646.0 11,775.2 11,839.6 11,981.9	-192.2 -190.7 -253.4 -246.0	11,838.2 11,965.9 12,093.0 12,227.9
2007:            	13,795.6 13,997.2 14,179.9 14,337.9	787.9 852.1 897.6 909.4	724.0 776.0 759.1 725.1	13,859.5 14,073.3 14,318.3 14,522.2	1,726.7 1,749.4 1,771.2 1,792.8	1,443.1 1,461.4 1,478.7 1,495.1	283.7 288.0 292.5 297.6	12,132.8 12,324.0 12,547.2 12,729.4	-121.1 -97.1 64.9 94.0	12,253.9 12,421.1 12,482.2 12,635.4
2008: I II III IV	14,373.9 14,497.8 14,546.7 14,347.3	856.3 840.5 825.6 714.4	685.3 711.6 664.8 607.4	14,544.9 14,626.6 14,707.5 14,454.3	1,813.6 1,835.6 1,858.2 1,881.0	1,510.6 1,527.0 1,544.4 1,562.6	303.0 308.5 313.8 318.4	12,731.2 12,791.1 12,849.3 12,573.3	69.8 126.7 68.3 139.4	12,661.5 12,664.4 12,781.0 12,433.9
2009: I II IV P	14,178.0 14,151.2 14,242.1 14,463.4	579.6 571.3 590.6	479.7 478.6 469.1	14,277.9 14,243.8 14,363.7	1,883.6 1,864.0 1,850.7 1,856.4	1,561.3 1,540.5 1,525.5 1,526.3	322.3 323.5 325.2 330.1	12,394.3 12,379.8 12,512.9	185.4 161.7 163.2	12,208.9 12,218.1 12,349.7

Source: Department of Commerce (Bureau of Economic Analysis).

TABLE B-27. Relation of national income and personal income, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			ions of dolla	irs, quarterry		asonany au	justeu annu	arratesj			
					Less:				Plu	JS:	Equals:
Year or quarter	National income	Corporate profits with inventory valuation and capital consumption adjustments	Taxes on production and imports less subsidies	Contributions for government social insurance, domestic	Net interest and miscel- laneous payments on assets	Business current transfer payments (net)	Current surplus of govern- ment enter- prises	Wage accruals less disburse- ments	Personal income receipts on assets	Personal current transfer receipts	Personal income
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977	888.5	53.1 54.2 62.3 68.3 75.5 86.5 92.5 90.2 97.3 94.5 82.5 96.1 111.4 124.5 115.1 133.3 161.6	43.4 45.0 48.1 51.2 54.5 57.7 59.3 64.1 72.2 79.3 86.6 95.8 101.3 112.0 121.6 130.8 141.3	16.4 17.0 19.1 21.7 22.4 31.3 34.9 38.7 44.1 46.4 51.2 75.5 85.2 89.3 101.3	10.6 12.5 14.2 15.2 17.4 19.6 22.4 25.5 27.1 32.7 39.1 43.9 47.9 70.8 81.6 85.5	1.9 2.0 2.7 3.1 3.5 3.8 4.3 4.9 4.5 4.3 4.9 6.0 7.1 9.4	0.9 8 9 1.4 1.3 1.0 9 1.0 0 -2 5 -4 -9 -3.2 -1.8	0.0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .1 .5	37.9 40.1 44.1 47.9 53.8 59.4 64.1 93.5 101.0 101.0 124.7 146.4 162.2	25.7 29.5 30.4 32.2 33.5 36.2 39.6 48.0 56.1 97.9 112.6 133.3 170.0 184.0	411.3 428.8 456.4 479.5 514.3 555.5 603.8 648.1 711.7 778.3 838.6 903.1 992.6 1,110.5 1,222.7 1,334.9
1980	1,797.4 2,027.9 2,248.3 2,433.0 2,729.8 2,851.4	191.8 218.4 225.4 201.4 223.3 205.7	152.6 162.0 171.6 190.5 224.2 225.9	113.1 131.3 152.7 166.2 195.7 208.9	101.1 115.0 138.9 181.8 232.3 271.1	8.5 10.8 13.3 14.7 17.9 20.6	-2.7 -2.2 -2.9 -5.1 -5.6 -4.5	.1 .3 2 .0 .1	205.3 234.8 274.7 338.7 421.9 488.4	194.2 209.6 235.3 279.5 318.4 354.8	1,632.5 1,836.7 2,059.5 2,301.5 2,582.3 2,766.8
1982 1983 1984 1985 1986 1987 1988	3,070.9 3,461.3 3,696.3 3,871.5 4,150.0 4,522.3 4,800.5	259.8 318.6 332.5 314.1 367.8 426.6 425.6	242.0 268.7 286.8 298.5 317.3 345.0 371.4	226.0 257.5 281.4 303.4 323.1 361.5 385.2	285.3 327.1 341.5 367.1 366.7 385.3 434.1	22.6 30.3 35.2 36.9 34.1 33.6 39.2	-3.2 -1.9 .6 .9 .2 2.6 4.9	4 .2 2 .0 .0	529.6 607.9 653.2 694.5 715.8 767.0 874.8	383.7 400.1 424.9 451.0 467.6 496.5 542.6	2,952.2 3,268.9 3,496.7 3,696.0 3,924.4 4,231.2 4,557.5
1990 1991 1992 1993 1994 1995 1996 1997 1997 1998	5,059.5 5,217.9 5,517.1 5,784.7 6,181.3 6,522.3 6,931.7 7,406.0 7,875.6 8,358.0	434.4 457.3 496.2 543.7 628.2 716.2 801.5 884.8 812.4 856.3	398.0 429.6 453.3 466.4 512.7 523.1 545.5 577.8 603.1 628.4	410.1 430.2 455.0 477.4 508.2 532.8 555.1 587.2 624.7 661.3	444.2 418.2 387.7 364.6 362.2 358.3 371.1 407.6 479.3 481.4	40.1 39.9 40.7 40.5 41.9 45.8 53.8 51.3 65.2 69.0	1.6 5.7 8.2 8.7 9.6 13.1 14.4 14.1 13.3 14.1	.1 15.8 6.4 17.6 16.4 3.6 -2.9 7 5.2	920.8 928.6 909.7 900.5 947.7 1,005.4 1,080.7 1,165.5 1,269.2 1,246.8	594.9 665.9 745.8 790.8 826.4 878.9 924.1 949.2 977.9 1,021.6	4,846.7 5,031.5 5,347.3 5,568.1 5,874.8 6,200.9 6,591.6 7,000.7 7,525.4 7,910.8
2000	8,938.9 9,185.2 9,408.5 9,840.2 10,534.0 11,273.8 12,031.2 12,448.2 12,635.2	819.2 784.2 872.2 977.8 1,246.9 1,456.1 1,608.3 1,541.7 1,360.4	662.7 669.0 721.4 757.7 817.0 869.3 935.5 974.0 993.8 964.3	705.8 733.2 751.5 778.9 827.3 872.7 921.8 959.3 990.6	539.3 544.4 506.4 504.1 461.6 543.0 652.2 739.2 815.1 786.2	87.0 101.3 82.4 76.1 81.7 95.9 83.0 102.2 118.8 134.0	9.1 4.0 6.3 7.0 1.2 -3.5 -4.2 -6.6 -6.9 -8.1	.0 .0 .0 .0 .15.0 -15.0 5.0 1.3 -6.3 -5.0	1,360.7 1,346.0 1,309.6 1,312.9 1,408.5 1,542.0 1,829.7 2,031.5 1,994.4 1,791.5	1,083.0 1,188.1 1,282.1 1,341.7 1,415.5 1,508.6 1,605.0 1,718.0 1,875.9 2,106.9	8,559.4 8,883.3 9,060.1 9,378.1 9,937.2 10,485.9 11,268.1 11,894.1 12,238.8 12,072.1
2006:            V	11,838.2 11,965.9 12,093.0 12,227.9	1,590.9 1,597.7 1,655.1 1,589.6	916.0 931.9 941.9 952.1	915.4 917.4 920.8 933.8	608.9 654.4 661.6 684.0	82.8 79.3 83.6 86.1	-2.4 -3.8 -4.7 -6.0	-20.0 .0 .0 25.0	1,711.1 1,817.2 1,881.3 1,909.0	1,569.0 1,597.9 1,620.7 1,632.4	11,026.7 11,204.0 11,336.9 11,504.8
2007:            V	12,253.9 12,421.1 12,482.2 12,635.4	1,535.4 1,594.9 1,537.1 1,499.4	966.0 966.9 976.1 986.8	952.5 953.7 958.6 972.6	690.6 711.3 756.0 798.9	97.8 99.0 105.0 107.0	-8.4 -6.9 -4.9 -6.0	-25.0 .0 .0 .0	1,968.2 2,022.0 2,065.8 2,069.8	1,693.8 1,699.1 1,725.5 1,753.7	11,706.9 11,823.4 11,945.6 12,100.3
2008:            V	12,661.5 12,664.4 12,781.0 12,433.9	1,459.7 1,403.7 1,454.6 1,123.6	989.3 997.9 1,005.7 982.1	985.3 988.9 994.9 993.3	790.7 809.0 806.1 854.7	114.8 112.6 116.0 131.8	-5.6 -6.3 -6.9 -8.9	.0 .0 .0 –20.0	2,020.8 1,997.3 2,001.4 1,958.1	1,794.1 1,937.0 1,874.3 1,898.0	12,142.2 12,292.9 12,286.6 12,233.5
2009:            V <sup>p</sup>	12,208.9 12,218.1 12,349.7	1,182.7 1,226.5 1,358.9	963.2 964.6 955.4 973.8	969.7 970.9 974.0 978.4	826.2 784.4 759.7 774.7	137.9 145.4 124.8 128.1	-10.7 -8.8 -6.3 -6.6	20.0 .0 .0 .0	1,845.5 1,773.4 1,763.1 1,784.0	1,987.3 2,140.3 2,137.5 2,162.5	11,952.7 12,048.8 12,083.9 12,203.1

Source: Department of Commerce (Bureau of Economic Analysis).

# Table B-28. National income by type of income, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

					sation of en		any aujuste		Proprie	etors' incom valuation a option adjus	nd capital	Rental income
			Wage a	and salary a	ccruals		upplements ges and sala					of per- sons
Year or quarter	National income	Total	Total	Govern- ment	Other	Total	Employer contribu- tions for employee pension and insurance funds	Employer contribu- tions for govern- ment social insur- ance	Total	Farm	Non- farm	with capital con- sump- tion adjust- ment
1960	490.7 528.9 559.7 601.4 652.2 710.1 750.4 821.2	296.4 305.3 327.1 345.2 370.7 399.5 442.7 475.1 524.3 577.6	272.9 280.5 299.4 314.9 337.8 363.8 400.3 429.0 472.0 518.3	49.2 52.5 56.3 60.0 64.9 69.9 78.4 86.5 96.7	223.7 228.0 243.0 254.8 272.9 293.8 321.9 342.5 375.3 412.7	23.6 24.8 27.8 30.4 32.9 35.7 42.3 46.1 52.3 59.3	14.3 15.2 16.6 18.0 20.3 22.7 25.5 28.1 32.4 36.5	9.3 9.6 11.2 12.4 12.6 13.1 16.8 18.0 20.0 22.8	50.7 53.2 55.3 56.5 59.4 63.9 68.2 69.8 74.2 77.5	10.6 11.2 11.2 11.0 9.8 12.0 13.0 11.6 11.7	40.1 42.0 44.1 45.5 49.6 51.9 55.2 58.2 62.5 64.7	17.0 17.7 18.6 19.3 19.4 19.9 20.5 20.9 20.6
1970 1971 1972 1973 1974 1975 1976 1977 1978	1,005.6 1,110.3 1,246.1 1,341.5 1,444.0 1,609.8 1,797.4 2,027.9 2,248.3	617.2 658.9 725.1 811.2 890.2 949.1 1,059.3 1,180.5 1,335.5 1,498.3	551.6 584.5 638.8 708.8 772.3 814.8 899.7 994.2 1,120.6 1,253.3	117.2 126.8 137.9 148.8 160.5 176.2 188.9 202.6 220.0 237.1	434.3 457.8 500.9 560.0 611.8 638.6 710.8 791.6 900.6 1,016.2	65.7 74.4 86.4 102.5 118.0 134.3 159.6 186.4 214.9 245.0	41.8 47.9 55.2 62.7 73.3 87.6 105.2 125.3 143.4 162.4	23.8 26.4 31.2 39.8 44.7 46.7 54.4 61.1 71.5 82.6	78.5 84.7 96.0 113.6 113.5 119.6 132.2 146.0 167.5 181.1	12.9 13.4 17.0 29.1 23.5 22.0 17.2 16.0 19.9 22.2	65.6 71.3 79.0 84.6 90.0 97.6 115.0 130.1 147.6 159.0	21.1 22.2 23.1 23.9 24.0 23.4 22.1 19.6 20.9 22.6
1980 1981 1982 1983 1984 1985 1986 1986 1987	2,729.8 2,851.4 3,070.9 3,461.3 3,696.3 3,871.5 4,150.0 4,522.3 4,800.5	1,647.6 1,819.7 1,919.6 2,035.5 2,245.4 2,411.7 2,557.7 2,735.6 2,954.2 3,131.3	1,373.4 1,511.4 1,587.5 1,677.5 1,844.9 1,982.6 2,102.3 2,256.3 2,439.8 2,583.1	261.5 285.8 307.5 324.8 348.1 373.9 397.2 423.1 452.0 481.1	1,112.0 1,225.5 1,280.0 1,352.7 1,496.8 1,608.7 1,705.1 1,833.1 1,987.7 2,101.9	274.2 308.3 332.1 358.0 400.5 429.2 455.3 479.4 514.4 548.3	185.2 204.7 222.4 238.1 261.5 281.5 297.5 313.1 329.7 354.6	88.9 103.6 109.8 119.9 139.0 147.7 157.9 166.3 184.6 193.7	173.5 181.6 174.8 190.7 233.1 246.1 262.6 294.2 334.8 351.6	11.7 19.0 13.3 6.2 20.9 21.0 22.8 28.9 26.8 33.0	161.8 162.6 161.5 184.5 212.1 225.1 239.7 265.3 308.0 318.6	28.5 36.5 38.1 38.2 40.0 41.9 33.8 34.2 40.2 42.4
1990 1991 1992 1993 1994 1995 1996 1997 1998	5,217.9 5,517.1 5,784.7 6,181.3 6,522.3 6,931.7 7,406.0 7,875.6	3,326.3 3,438.3 3,631.4 3,797.1 3,998.5 4,195.2 4,391.4 4,665.6 5,023.2 5,353.9	2,741.2 2,814.5 2,957.8 3,083.0 3,248.5 3,434.4 3,620.0 3,873.6 4,180.9 4,465.2	519.0 548.8 572.0 589.0 609.5 629.0 648.1 671.8 701.2 733.7	2,222.2 2,265.7 2,385.8 2,494.0 2,639.0 2,805.4 2,971.9 3,201.8 3,479.7 3,731.5	585.1 623.9 673.6 714.1 750.1 760.8 771.4 792.0 842.3 888.8	378.6 408.7 445.2 474.4 495.9 496.7 496.6 502.4 535.1 565.4	206.5 215.1 228.4 239.7 254.1 264.1 274.8 289.6 307.2 323.3	365.1 367.3 414.9 449.6 485.1 516.0 583.7 628.2 687.5 746.8	32.2 27.5 35.8 32.0 35.6 23.4 38.4 32.6 28.9 28.5	333.0 339.8 379.1 417.6 449.5 492.6 545.2 595.6 658.7 718.3	49.8 61.6 84.6 114.1 142.9 154.6 170.4 176.5 191.5 208.2
2000	9,185.2 9,408.5 9,840.2 10,534.0 11,273.8 12,031.2 12,448.2	5,788.8 5,979.3 6,110.8 6,382.6 6,693.4 7,065.0 7,477.0 7,856.5 8,037.4 7,841.3	4,827.7 4,952.2 4,997.3 5,154.6 5,410.7 5,706.0 6,070.1 6,402.6 6,540.8 6,335.6	779.7 821.9 873.1 913.3 952.8 991.5 1,035.2 1,089.1 1,141.3 1,182.5	4,048.0 4,130.3 4,124.2 4,241.3 4,457.9 4,714.5 5,035.0 5,313.5 5,399.6 5,153.1	961.2 1,027.1 1,113.5 1,228.0 1,282.7 1,359.1 1,406.9 1,453.8 1,496.6 1,505.7	615.9 669.1 747.4 845.6 874.6 931.6 960.1 993.0 1,023.9 1,043.9	345.2 358.0 366.1 382.4 408.1 427.5 446.7 460.8 472.7 461.8	817.5 870.7 890.3 930.6 1,033.8 1,069.8 1,133.0 1,096.4 1,106.3 1,042.3	29.6 30.5 18.5 36.5 49.7 43.9 29.3 39.4 48.7 29.9	787.8 840.2 871.8 894.1 984.1 1,025.9 1,103.6 1,056.9 1,057.5 1,012.4	215.3 232.4 218.7 204.2 198.4 178.2 146.5 144.9 210.4 268.3
2006: I II IV	11,965.9	7,353.7 7,419.9 7,484.1 7,650.3	5,958.9 6,018.6 6,075.4 6,227.6	1,019.0 1,028.3 1,041.0 1,052.3	4,939.9 4,990.3 5,034.5 5,175.4	1,394.8 1,401.3 1,408.7 1,422.6	950.7 956.8 962.7 970.4	444.1 444.5 445.9 452.2	1,126.9 1,133.2 1,131.2 1,140.6	28.4 28.4 28.4 32.2	1,098.5 1,104.8 1,102.8 1,108.4	161.3 153.2 140.3 131.2
2007:            	12,253.9 12,421.1 12,482.2 12,635.4	7,757.2 7,819.7 7,869.6 7,979.3	6,318.6 6,372.2 6,412.5 6,507.3	1,073.2 1,084.2 1,093.2 1,105.8	5,245.3 5,288.0 5,319.4 5,401.4	1,438.6 1,447.5 1,457.1 1,472.1	980.5 989.4 996.9 1,005.2	458.1 458.2 460.2 466.9	1,094.2 1,096.0 1,093.2 1,102.1	36.7 35.7 37.5 47.9	1,057.5 1,060.3 1,055.7 1,054.2	121.1 140.3 150.2 168.0
2008: I II III IV	12,661.5 12,664.4 12,781.0 12,433.9	8,017.5 8,032.8 8,069.1 8,030.3	6,533.0 6,539.2 6,567.7 6,523.5	1,125.3 1,136.4 1,148.5 1,154.9	5,407.7 5,402.8 5,419.2 5,368.6	1,484.5 1,493.5 1,501.4 1,506.8	1,014.0 1,021.7 1,026.7 1,033.2	470.5 471.8 474.7 473.6	1,115.2 1,111.9 1,114.4 1,083.6	57.2 49.4 49.3 39.0	1,057.9 1,062.5 1,065.1 1,044.5	179.9 202.8 222.2 236.7
2009:         	12,218.1	7,825.8 7,815.9 7,841.5 7,882.1	6,327.8 6,313.1 6,333.2 6,368.2	1,171.8 1,184.4 1,184.8 1,189.0	5,156.0 5,128.8 5,148.4 5,179.2	1,498.0 1,502.8 1,508.3 1,513.8	1,037.8 1,042.0 1,046.1 1,049.8	460.2 460.8 462.2 464.1	1,037.8 1,028.0 1,037.9 1,065.5	27.3 28.9 25.8 37.4	1,010.5 999.1 1,012.0 1,028.1	245.9 262.0 277.9 287.4

See next page for continuation of table.

TABLE B-28. National income by type of income, 1960-2009—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Corp	orate profi	its with in			-	consumption							
					ory valuati consumpt					Net	Taxes		Busi-	Current
Year or quarter					Profits			Inven-	Capital con-	interest and miscel-	on produc-	Less: Sub-	ness current transfer	surplus of govern-
	Total	Total	Profits	Taxes on	Pro	ofits after	tax	tory valua-	sump- tion adjust-	laneous pay- ments	tion and imports	sidies	pay- ments (net)	ment enter- prises
			before tax	corpo- rate income	Total	Net divi- dends	Undis- tributed profits	tion adjust- ment	ment	IIIeitis	·		(Het)	ризез
1960	53.1 54.2 62.3 68.3 75.5 86.5 92.5 90.2 97.3 94.5	51.5 51.8 57.0 62.1 68.6 78.9 84.6 82.0 88.8 85.5	51.6 51.6 57.0 62.1 69.1 80.2 86.7 83.5 92.4 91.4	22.8 22.9 24.1 26.4 28.2 31.1 33.9 32.9 39.6 40.0 34.8	28.8 28.7 32.9 35.7 40.9 49.1 52.8 50.6 52.8 51.4 46.2	13.4 13.9 15.0 16.2 18.2 20.2 20.7 21.5 23.5 24.2 24.3	15.5 14.8 17.9 19.5 22.7 28.9 32.1 29.1 29.3 27.2	-0.2 .3 .0 .1 5 -1.2 -2.1 -1.6 -3.7 -5.9 -6.6	1.6 2.3 5.3 6.2 6.9 7.6 8.0 8.2 8.5 9.0	10.6 12.5 14.2 15.2 17.4 19.6 22.4 25.5 27.1 32.7 39.1	44.5 47.0 50.4 53.4 57.3 60.7 63.2 67.9 76.4 83.9 91.4	1.1 2.0 2.3 2.2 2.7 3.0 3.9 3.8 4.2 4.5	1.9 2.0 2.2 2.7 3.1 3.6 3.5 3.8 4.3 4.9	0.9 .8 .9 1.4 1.3 1.3 1.0 .9 1.2
1971 1972 1973 1974 1974 1975 1976 1977 1978	96.1 111.4 124.5 115.1 133.3 161.6 191.8 218.4 225.4	88.3 101.6 115.4 109.6 135.0 165.6 194.8 222.4 232.0	92.9 108.2 135.0 147.8 145.5 179.7 210.5 246.1 272.1	38.2 42.3 50.0 52.8 51.6 65.3 74.4 84.9 90.0	54.7 65.9 85.0 95.0 93.9 114.5 136.1 161.3 182.1	25.0 26.8 29.9 33.2 33.0 39.0 44.8 50.8 57.5	29.7 39.0 55.1 61.8 60.9 75.4 91.3 110.5 124.6	-4.6 -6.6 -19.6 -38.2 -10.5 -14.1 -15.7 -23.7 -40.1	7.8 9.8 9.1 5.6 -1.7 -4.0 -3.0 -4.0 -6.6	43.9 47.9 55.2 70.8 81.6 85.5 101.1 115.0 138.9	100.5 107.9 117.2 124.9 135.3 146.4 159.7 170.9 180.1	4.7 6.6 5.2 3.3 4.5 5.1 7.1 8.9 8.5	4.3 4.9 6.0 7.1 9.4 9.5 8.5 10.8 13.3	.0 2 .5 4 9 -3.2 -1.8 -2.7 -2.2 -2.9
1980 1981 1982 1983 1984 1985 1986 1987 1988	201.4 223.3 205.7 259.8 318.6 332.5 314.1 367.8 426.6 425.6	211.4 219.1 191.1 226.6 264.6 257.5 253.0 306.9 367.7 374.1	253.5 243.7 198.6 234.0 268.6 257.5 246.0 323.1 389.9 390.5	87.2 84.3 66.5 80.6 97.5 99.4 109.7 130.4 141.6 146.1	166.4 159.4 132.1 153.4 171.1 158.1 136.3 192.7 248.3 244.4	64.1 73.8 77.7 83.5 90.8 97.6 106.2 112.3 129.9 158.0	102.3 85.6 54.4 69.9 80.3 60.5 30.1 80.3 118.4 86.4	-42.1 -24.6 -7.5 -7.4 -4.0 0 7.1 -16.2 -22.2 -16.3	-10.0 4.2 14.6 33.3 54.0 75.1 61.1 61.0 58.9 51.5	181.8 232.3 271.1 285.3 327.1 341.5 367.1 366.7 385.3 434.1	200.3 235.6 240.9 263.3 289.8 308.1 323.4 347.5 374.5 398.9	9.8 11.5 15.0 21.3 21.1 21.4 24.9 30.3 29.5 27.4	14.7 17.9 20.6 22.6 30.3 35.2 36.9 34.1 33.6 39.2	-5.1 -5.6 -4.5 -3.2 -1.9 .6 .9 .2 2.6 4.9
1990 1991 1992 1993 1994 1995 1996 1997 1998	434.4 457.3 496.2 543.7 628.2 716.2 801.5 884.8 812.4 856.3	398.8 430.3 471.6 515.0 586.6 666.0 743.8 815.9 738.6 776.6	411.7 425.4 474.4 519.0 599.0 684.3 740.7 801.8 722.9 780.5	145.4 138.6 148.7 171.0 193.1 217.8 231.5 245.4 248.4 258.8	266.3 286.8 325.7 348.0 405.9 466.5 509.3 556.3 474.5 521.7	169.1 180.7 188.0 202.9 235.7 254.4 297.7 331.2 351.5 337.4	97.2 106.1 137.7 145.1 170.2 212.1 211.5 225.1 123.1 184.3	-12.9 4.9 -2.8 -4.0 -12.4 -18.3 3.1 14.1 15.7 -4.0	35.7 27.0 24.6 28.7 41.6 50.2 57.7 69.0 73.8 79.7	444.2 418.2 387.7 364.6 362.2 358.3 371.1 407.6 479.3 481.4	425.0 457.1 483.4 503.1 545.2 557.9 580.8 611.6 639.5 673.6	27.0 27.5 30.1 36.7 32.5 34.8 35.2 33.8 36.4 45.2	40.1 39.9 40.7 40.5 41.9 45.8 53.8 51.3 65.2 69.0	1.6 5.7 8.2 8.7 9.6 13.1 14.4 14.1 13.3
2000	819.2 784.2 872.2 977.8 1,246.9 1,456.1 1,608.3 1,541.7 1,360.4	755.7 720.8 762.8 892.2 1,195.1 1,609.5 1,784.7 1,730.4 1,424.5	772.5 712.7 765.3 903.5 1,229.4 1,640.2 1,822.7 1,774.4 1,462.7	265.1 203.3 192.3 243.8 306.1 412.4 473.3 451.5 292.2	507.4 509.4 573.0 659.7 923.3 1,227.8 1,349.5 1,322.8 1,170.6	377.9 370.9 399.3 424.9 550.3 557.3 704.8 767.8 689.9 576.1	129.5 138.5 173.8 234.8 373.0 670.5 644.7 555.1 480.7	-16.8 8.0 -2.6 -11.3 -34.3 -30.7 -38.0 -44.0 -38.2	63.6 63.4 109.4 85.6 51.8 -153.4 -176.4 -188.7 -64.1 -127.7	539.3 544.4 506.4 504.1 461.6 543.0 652.2 739.2 815.1 786.2	708.6 727.7 762.8 806.8 863.4 930.2 986.8 1,028.7 1,047.3 1,023.9	45.8 58.7 41.4 49.1 46.4 60.9 51.4 54.8 53.5 59.7	87.0 101.3 82.4 76.1 81.7 95.9 83.0 102.2 118.8 134.0	9.1 4.0 6.3 7.0 1.2 -3.5 -4.2 -6.6 -6.9
2006:            	1,590.9 1,597.7 1,655.1 1,589.6	1,781.9 1,771.4 1,822.8 1,762.7	1,815.3 1,819.8 1,865.1 1,790.7	460.7 475.1 496.6 460.7	1,354.6 1,344.7 1,368.5 1,330.0	646.4 691.1 727.1 754.5	708.2 653.6 641.4 575.5	-33.4 -48.4 -42.3 -28.0	-191.0 -173.7 -167.7 -173.2	608.9 654.4 661.6 684.0	971.5 983.3 991.6 1,000.7	55.6 51.4 49.8 48.7	82.8 79.3 83.6 86.1	-2.4 -3.8 -4.7 -6.0
2007: I II IV	1,535.4 1,594.9 1,537.1 1,499.4	1,705.4 1,779.1 1,732.9 1,704.1	1,747.6 1,808.6 1,758.2 1,783.1	469.5 466.5 440.0 430.1	1,278.1 1,342.1 1,318.2 1,353.0	772.6 778.1 770.6 749.9	505.5 564.0 547.6 603.2	-42.2 -29.5 -25.3 -79.0	-170.0 -184.2 -195.8 -204.7	690.6 711.3 756.0 798.9	1,015.3 1,025.2 1,032.2 1,042.3	49.2 58.3 56.0 55.4	97.8 99.0 105.0 107.0	-8.4 -6.9 -4.9 -6.0
2008: I II IV	1,459.7 1,403.7 1,454.6 1,123.6	1,512.9 1,463.8 1,522.2 1,199.3	1,620.8 1,593.5 1,576.6 1,060.1	323.2 317.5 304.8 223.3	1,297.6 1,276.0 1,271.9 836.8	719.4 693.7 676.6 669.9	578.2 582.3 595.3 166.9	-107.9 -129.6 -54.5 139.2	-53.2 -60.1 -67.6 -75.6	790.7 809.0 806.1 854.7	1,042.5 1,050.8 1,058.5 1,037.3	53.1 52.9 52.9 55.2	114.8 112.6 116.0 131.8	-5.6 -6.3 -6.9 -8.9
2009: I II IV P	1,182.7 1,226.5 1,358.9	1,327.6 1,355.1 1,477.8	1,246.5 1,337.1 1,495.0	270.3 305.9 321.0	976.1 1,031.1 1,173.9	618.1 556.0 549.9 580.5	358.0 475.1 624.1	81.1 18.1 –17.1	-144.9 -128.6 -118.9 -118.3	826.2 784.4 759.7 774.7	1,018.8 1,019.6 1,023.1 1,034.3	55.5 54.9 67.7 60.5	137.9 145.4 124.8 128.1	-10.7 -8.8 -6.3 -6.6

Source: Department of Commerce (Bureau of Economic Analysis).

## TABLE B-29. Sources of personal income, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

		,			on of emplo		ed /ed		Proprie	etors' incom valuation a option adjus	nd capital	Rental
			Wa di	age and sal	ary ts		upplements ges and sala					income of persons
Year or quarter	Personal income	Total	Total	Private indus- tries	Govern- ment	Total	Employer contribu- tions for employee pension and insurance funds	Employer contribu- tions for govern- ment social insurance	Total	Farm	Non- farm	with capital con- sump- tion adjust- ment
1960 1961 1962 1963 1964 1965 1966 1967 1968	411.3 428.8 456.4 479.5 514.3 555.5 603.8 648.1 711.7 778.3	296.4 305.3 327.1 345.2 370.7 399.5 442.7 475.1 524.3 577.6	272.9 280.5 299.4 314.9 337.8 363.8 400.3 429.0 472.0 518.3	223.7 228.0 243.0 254.8 272.9 293.8 321.9 342.5 375.3 412.7	49.2 52.5 56.3 60.0 64.9 69.9 78.4 86.5 96.7	23.6 24.8 27.8 30.4 32.9 35.7 42.3 46.1 52.3 59.3	14.3 15.2 16.6 18.0 20.3 22.7 25.5 28.1 32.4 36.5	9.3 9.6 11.2 12.4 12.6 13.1 16.8 18.0 20.0 22.8	50.7 53.2 55.3 56.5 59.4 63.9 68.2 69.8 74.2 77.5	10.6 11.2 11.2 11.0 9.8 12.0 13.0 11.6 11.7	40.1 42.0 44.1 45.5 49.6 51.9 55.2 58.2 62.5 64.7	17.0 17.7 18.6 19.3 19.4 19.9 20.5 20.9 20.6 20.9
1970 1971 1972 1973 1974 1975 1976 1977 1978	838.6 903.1 992.6 1,110.5 1,222.7 1,334.9 1,474.7 1,632.5 1,836.7 2,059.5	617.2 658.3 725.1 811.3 890.7 949.0 1,059.2 1,180.4 1,335.2 1,498.5	551.6 584.0 638.8 708.8 772.8 814.7 899.6 994.1 1,120.3 1,253.5	434.3 457.4 501.2 560.0 611.8 638.6 710.8 791.6 900.6 1,016.2	117.2 126.6 137.6 148.8 161.0 176.1 188.8 202.5 219.7 237.3	65.7 74.4 86.4 102.5 118.0 134.3 159.6 186.4 214.9 245.0	41.8 47.9 55.2 62.7 73.3 87.6 105.2 125.3 143.4 162.4	23.8 26.4 31.2 39.8 44.7 46.7 54.4 61.1 71.5 82.6	78.5 84.7 96.0 113.6 113.5 119.6 132.2 146.0 167.5 181.1	12.9 13.4 17.0 29.1 23.5 22.0 17.2 16.0 19.9 22.2	65.6 71.3 79.0 84.6 90.0 97.6 115.0 130.1 147.6 159.0	21.1 22.2 23.1 23.9 24.0 23.4 22.1 19.6 20.9 22.6
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	2,301.5 2,582.3 2,766.8 2,952.2 3,268.9 3,496.7 3,696.0 3,924.4 4,231.2 4,557.5	1,647.6 1,819.6 1,919.6 2,036.0 2,245.2 2,412.0 2,557.7 2,735.6 2,954.2 3,131.3	1,373.5 1,511.3 1,587.5 1,678.0 1,844.7 1,982.8 2,102.3 2,256.3 2,439.8 2,583.1	1,112.0 1,225.5 1,280.0 1,352.7 1,496.8 1,608.7 1,705.1 1,833.1 1,987.7 2,101.9	261.5 285.8 307.5 325.2 347.9 374.1 397.2 423.1 452.0 481.1	274.2 308.3 332.1 358.0 400.5 429.2 455.3 479.4 514.4 548.3	185.2 204.7 222.4 238.1 261.5 281.5 297.5 313.1 329.7 354.6	88.9 103.6 109.8 119.9 139.0 147.7 157.9 166.3 184.6 193.7	173.5 181.6 174.8 190.7 233.1 246.1 262.6 294.2 334.8 351.6	11.7 19.0 13.3 6.2 20.9 21.0 22.8 28.9 26.8 33.0	161.8 162.6 161.5 184.5 212.1 225.1 239.7 265.3 308.0 318.6	28.5 36.5 38.1 38.2 40.0 41.9 33.8 34.2 40.2 42.4
1990 1991 1992 1993 1994 1995 1996 1997 1998	4,846.7 5,031.5 5,347.3 5,568.1 5,874.8 6,200.9 6,591.6 7,000.7 7,525.4 7,910.8	3,326.2 3,438.4 3,647.2 3,790.6 3,980.9 4,178.8 4,387.7 4,668.6 5,023.9 5,348.8	2,741.1 2,814.5 2,973.5 3,076.6 3,230.8 3,418.0 3,616.3 3,876.6 4,181.6 4,460.0	2,222.2 2,265.7 2,401.5 2,487.6 2,621.3 2,789.0 2,968.3 3,204.8 3,480.4 3,726.3	519.0 548.8 572.0 589.0 609.5 629.0 648.1 671.8 701.2 733.7	585.1 623.9 673.6 714.1 750.1 760.8 771.4 792.0 842.3 888.8	378.6 408.7 445.2 474.4 495.9 496.7 496.6 502.4 535.1 565.4	206.5 215.1 228.4 239.7 254.1 264.1 274.8 289.6 307.2 323.3	365.1 367.3 414.9 449.6 485.1 516.0 583.7 628.2 687.5 746.8	32.2 27.5 35.8 32.0 35.6 23.4 38.4 32.6 28.9 28.5	333.0 339.8 379.1 417.6 449.5 492.6 545.2 595.6 658.7 718.3	49.8 61.6 84.6 114.1 142.9 154.6 170.4 176.5 208.2
2000	8,559.4 8,883.3 9,060.1 9,378.1 9,937.2 10,485.9 11,268.1 11,894.1 12,238.8 12,072.1	5,788.8 5,979.3 6,110.8 6,367.6 6,708.4 7,060.0 7,475.7 7,862.7 8,042.4 7,836.3	4,827.7 4,952.2 4,997.3 5,139.6 5,425.7 5,701.0 6,068.9 6,408.9 6,545.9 6,330.6	4,048.0 4,130.3 4,124.2 4,226.3 4,472.9 4,709.5 5,033.7 5,319.8 5,404.6 5,148.1	779.7 821.9 873.1 913.3 952.8 991.5 1,035.2 1,089.1 1,141.3 1,182.5	961.2 1,027.1 1,113.5 1,228.0 1,282.7 1,359.1 1,406.9 1,453.8 1,496.6 1,505.7	615.9 669.1 747.4 845.6 874.6 931.6 960.1 993.0 1,023.9 1,043.9	345.2 358.0 366.1 382.4 408.1 427.5 446.7 460.8 472.7 461.8	817.5 870.7 890.3 930.6 1,033.8 1,069.8 1,133.0 1,096.4 1,106.3 1,042.3	29.6 30.5 18.5 36.5 49.7 43.9 29.3 39.4 48.7 29.9	787.8 840.2 871.8 894.1 984.1 1,025.9 1,103.6 1,056.9 1,057.5 1,012.4	215.3 232.4 218.7 204.2 198.4 178.2 146.5 144.9 210.4 268.3
2006: I II IV	11,026.7 11,204.0 11,336.9 11,504.8	7,373.7 7,419.9 7,484.1 7,625.3	5,978.9 6,018.6 6,075.4 6,202.6	4,959.9 4,990.3 5,034.5 5,150.4	1,019.0 1,028.3 1,041.0 1,052.3	1,394.8 1,401.3 1,408.7 1,422.6	950.7 956.8 962.7 970.4	444.1 444.5 445.9 452.2	1,126.9 1,133.2 1,131.2 1,140.6	28.4 28.4 28.4 32.2	1,098.5 1,104.8 1,102.8 1,108.4	161.3 153.2 140.3 131.2
2007:            	11,706.9 11,823.4 11,945.6 12,100.3	7,782.2 7,819.7 7,869.6 7,979.3	6,343.6 6,372.2 6,412.5 6,507.3	5,270.3 5,288.0 5,319.4 5,401.4	1,073.2 1,084.2 1,093.2 1,105.8	1,438.6 1,447.5 1,457.1 1,472.1	980.5 989.4 996.9 1,005.2	458.1 458.2 460.2 466.9	1,094.2 1,096.0 1,093.2 1,102.1	36.7 35.7 37.5 47.9	1,057.5 1,060.3 1,055.7 1,054.2	121.1 140.3 150.2 168.0
2008: I II IV	12,142.2 12,292.9 12,286.6 12,233.5	8,017.5 8,032.8 8,069.1 8,050.3	6,533.0 6,539.2 6,567.7 6,543.5	5,407.7 5,402.8 5,419.2 5,388.6	1,125.3 1,136.4 1,148.5 1,154.9	1,484.5 1,493.5 1,501.4 1,506.8	1,014.0 1,021.7 1,026.7 1,033.2	470.5 471.8 474.7 473.6	1,115.2 1,111.9 1,114.4 1,083.6	57.2 49.4 49.3 39.0	1,057.9 1,062.5 1,065.1 1,044.5	179.9 202.8 222.2 236.7
2009: I II IV P	11,952.7 12,048.8 12,083.9 12,203.1	7,805.8 7,815.9 7,841.5 7,882.1	6,307.8 6,313.1 6,333.2 6,368.2	5,136.0 5,128.8 5,148.4 5,179.2	1,171.8 1,184.4 1,184.8 1,189.0	1,498.0 1,502.8 1,508.3 1,513.8	1,037.8 1,042.0 1,046.1 1,049.8	460.2 460.8 462.2 464.1	1,037.8 1,028.0 1,037.9 1,065.5	27.3 28.9 25.8 37.4	1,010.5 999.1 1,012.0 1,028.1	245.9 262.0 277.9 287.4

See next page for continuation of table.

## TABLE B-29. Sources of personal income, 1960-2009—Continued

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Person	al income re on assets	eceipts			Perso	onal current	transfer rec	eipts			Less:
						Govern	ment social	benefits to	persons		041	Contribu- tions
Year or quarter	Total	Personal interest income	Personal dividend income	Total	Total	Old-age, survivors, disability, and health insurance benefits	Govern- ment un- employ- ment insur- ance benefits	Veterans benefits	Family assis- tance <sup>1</sup>	Other	Other current transfer receipts, from business (net)	for govern- ment social insurance, domestic
1960 1961 1962 1963 1964 1965 1966 1967 1967	37.9 40.1 44.1 47.9 53.8 59.4 64.1 69.0 75.2 84.1	24.5 26.2 29.1 31.7 35.6 39.2 43.4 47.5 51.6 59.9	13.4 13.9 15.0 16.2 18.2 20.2 20.7 21.5 23.5 24.2	25.7 29.5 30.4 32.2 33.5 36.2 39.6 48.0 56.1 62.3	24.4 28.1 28.8 30.3 31.3 33.9 37.5 45.8 53.3 59.0	11.1 12.6 14.3 15.2 16.0 18.1 20.8 25.8 30.5 33.1	3.0 4.3 3.1 3.0 2.7 2.3 1.9 2.2 2.1	4.6 5.0 4.7 4.8 4.7 4.9 4.9 5.6 5.9	1.0 1.1 1.3 1.4 1.5 1.7 1.9 2.3 2.8 3.5	4.7 5.1 5.5 5.9 6.4 7.0 8.1 9.9 11.9	1.3 1.4 1.5 1.9 2.2 2.3 2.1 2.3 2.8 3.3	16.4 17.0 19.1 21.7 22.4 23.4 31.3 34.9 38.7 44.1
1970 1971 1972 1973 1974 1975 1976 1977 1978	93.5 101.0 109.6 124.7 146.4 162.2 178.4 205.3 234.8 274.7	69.2 75.9 82.8 94.8 113.2 129.3 139.5 160.6 184.0 217.3	24.3 25.0 26.8 29.9 33.2 32.9 39.0 44.7 50.7 57.4	74.7 88.1 97.9 112.6 133.3 170.0 184.0 194.2 209.6 235.3	71.7 85.4 94.8 108.6 128.6 163.1 177.3 189.1 203.2 227.1	38.6 44.7 49.8 60.9 70.3 81.5 93.3 105.3 116.9 132.5	4.0 5.8 5.7 4.4 6.8 17.6 15.8 12.7 9.1	7.7 8.8 9.7 10.4 11.8 14.5 14.4 13.8 13.9	4.8 6.2 6.9 7.2 8.0 9.3 10.1 10.6 10.8	16.6 20.0 22.7 25.7 31.7 40.2 43.7 46.7 52.5 59.6	2.9 2.7 3.1 3.9 4.7 6.8 6.7 5.1 6.5 8.2	46.4 51.2 59.2 75.5 85.2 89.3 101.3 113.1 131.3
1980	338.7 421.9 488.4 529.6 607.9 653.2 694.5 715.8 767.0 874.8	274.7 348.3 410.8 446.3 517.2 555.8 588.4 603.6 637.3 717.0	64.0 73.6 77.6 83.3 90.6 97.4 106.0 112.2 129.7 157.8	279.5 318.4 354.8 383.7 400.1 424.9 451.0 467.6 496.5 542.6	270.8 307.2 342.4 369.9 380.4 402.6 428.0 447.4 475.9 519.4	154.8 182.1 204.6 222.2 237.8 253.0 268.9 282.6 300.2 325.6	15.7 15.6 25.1 26.2 15.9 15.7 16.3 14.5 13.2	15.0 16.1 16.4 16.6 16.4 16.7 16.7 16.6 16.9	12.5 13.1 12.9 13.8 14.5 15.2 16.1 16.4 16.9	72.8 80.2 83.4 91.0 95.9 102.0 109.9 117.3 128.7	8.6 11.2 12.4 13.8 19.7 22.3 22.9 20.2 20.6 23.2	166.2 195.7 208.9 226.0 257.5 281.4 303.4 323.1 361.5 385.2
1990 1991 1992 1993 1994 1995 1996 1997 1998	920.8 928.6 909.7 900.5 947.7 1,005.4 1,080.7 1,165.5 1,269.2	751.9 748.2 722.2 698.1 712.7 751.9 784.4 835.8 919.3 910.9	168.8 180.3 187.6 202.3 235.0 253.4 296.4 329.7 349.8 335.9	594.9 665.9 745.8 790.8 826.4 878.9 924.1 949.2 977.9 1,021.6	572.7 648.2 729.5 776.7 813.1 860.2 901.2 929.8 951.9 987.6	351.8 381.7 414.4 444.7 476.6 508.9 536.9 563.5 574.7 588.6	18.0 26.6 38.9 34.1 23.5 21.4 22.0 19.9 19.5 20.3	17.8 18.3 19.3 20.0 20.1 20.9 21.7 22.6 23.5 24.3	19.2 21.1 22.2 22.8 23.2 22.6 20.3 17.9 17.4	165.9 200.5 234.6 255.0 269.7 286.4 300.3 306.0 316.8 336.4	22.2 17.6 16.3 14.1 13.3 18.7 22.9 19.4 26.0 34.0	410.1 430.2 455.0 477.4 508.2 532.8 555.1 587.2 624.7 661.3
2000	1,360.7 1,346.0 1,309.6 1,312.9 1,408.5 1,542.0 1,829.7 2,031.5 1,994.4 1,791.5	984.2 976.5 911.9 889.8 860.2 987.0 1,127.5 1,266.4 1,308.0 1,236.9	376.5 369.5 397.7 423.1 548.3 555.0 702.2 765.1 686.4 554.6	1,083.0 1,188.1 1,282.1 1,341.7 1,415.5 1,508.6 1,605.0 1,718.0 1,875.9 2,106.9	1,040.6 1,141.3 1,247.9 1,316.0 1,398.6 1,482.7 1,583.6 1,687.8 1,843.2 2,074.2	620.5 667.7 706.1 740.4 790.2 844.7 943.3 1,003.7 1,070.3 1,156.7	20.6 31.7 53.2 52.8 36.0 31.3 29.9 32.3 50.6 120.3	25.2 26.8 29.8 32.2 34.5 36.8 39.3 42.1 45.6 51.5	18.4 18.1 17.7 18.4 18.4 18.2 18.2 18.5 18.9	355.9 397.1 441.1 472.3 519.6 551.7 552.9 591.2 657.9 725.9	42.4 46.8 34.2 25.7 16.9 25.8 21.4 30.2 32.6 32.7	705.8 733.2 751.5 778.9 827.3 872.7 921.8 959.3 990.6 973.2
2006: I II IV	1,711.1 1,817.2 1,881.3 1,909.0	1,067.2 1,128.7 1,156.8 1,157.2	643.9 688.5 724.5 751.9	1,569.0 1,597.9 1,620.7 1,632.4	1,547.3 1,578.0 1,600.1 1,609.1	917.5 941.6 950.7 963.4	29.6 29.4 30.4 30.3	38.9 39.2 39.5 39.7	18.2 18.2 18.2 18.3	543.1 549.6 561.3 557.4	21.7 19.8 20.6 23.3	915.4 917.4 920.8 933.8
2007: I II IV	1,968.2 2,022.0 2,065.8 2,069.8	1,198.3 1,246.5 1,297.9 1,322.8	769.9 775.5 767.9 747.0	1,693.8 1,699.1 1,725.5 1,753.7	1,666.7 1,669.3 1,693.9 1,721.2	981.0 998.2 1,012.7 1,023.1	31.4 31.2 32.8 33.9	41.0 42.0 42.2 43.0	18.4 18.4 18.5 18.6	595.0 579.5 587.7 602.7	27.1 29.8 31.6 32.4	952.5 953.7 958.6 972.6
2008: I II IV	2,020.8 1,997.3 2,001.4 1,958.1	1,304.6 1,306.6 1,327.8 1,292.9	716.2 690.7 673.7 665.2	1,794.1 1,937.0 1,874.3 1,898.0	1,761.5 1,904.4 1,841.7 1,865.3	1,049.1 1,064.5 1,080.5 1,087.0	35.7 38.7 57.7 70.3	44.8 45.0 46.1 46.5	18.6 18.8 18.9 19.2	613.3 737.5 638.5 642.3	32.6 32.6 32.6 32.7	985.3 988.9 994.9 993.3
2009: I II IV P	1,845.5 1,773.4 1,763.1 1,784.0	1,243.4 1,241.1 1,234.9 1,228.2	602.1 532.3 528.2 555.8	1,987.3 2,140.3 2,137.5 2,162.5	1,954.7 2,107.7 2,104.7 2,129.6	1,128.5 1,151.1 1,165.8 1,181.5	96.2 122.5 135.7 126.7	50.3 50.5 52.0 53.3	19.5 19.7 19.9 20.1	660.4 763.9 731.2 748.1	32.5 32.7 32.8 32.9	969.7 970.9 974.0 978.4

<sup>&</sup>lt;sup>1</sup> Consists of aid to families with dependent children and, beginning in 1996, assistance programs operating under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

Source: Department of Commerce (Bureau of Economic Analysis).

## Table B-30. Disposition of personal income, 1960-2009

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

		Dimons of di	· ·			nal outlays			Pero	ent of disposersonal incom	able e <sup>2</sup>
	<b>D</b> 1	Less:	Equals: Dispos-					Equals:	Persona	l outlays	
Year or quarter	Personal income	Personal current taxes	able personal income	Total	Personal consump- tion expendi- tures	Personal interest pay- ments <sup>1</sup>	Personal current transfer payments	Personal saving	Total	Personal consump- tion expendi- tures	Personal saving
1960 1961 1962 1963 1964 1965 1966 1967 1968	411.3 428.8 456.4 479.5 514.3 555.5 603.8 648.1 711.7 778.3	46.1 47.3 51.6 54.6 52.1 57.7 66.4 73.0 87.0 104.5	365.2 381.6 404.9 425.0 462.3 497.8 537.4 575.1 624.7 673.8	338.9 349.7 371.4 391.8 421.7 455.1 493.1 520.9 572.2 621.4	331.8 342.2 363.3 382.7 411.5 443.8 480.9 507.8 558.0 605.1	6.2 6.5 7.0 7.9 8.9 9.9 10.7 11.1 12.2 14.0	0.8 1.0 1.1 1.2 1.3 1.4 1.6 2.0 2.0 2.2	26.3 31.9 33.5 33.1 40.5 42.7 44.3 54.2 52.5 52.5	92.8 91.6 91.7 92.2 91.2 91.4 91.8 90.6 91.6 92.2	90.9 89.7 89.7 90.0 89.2 89.5 88.3 89.3 89.8	7.2 8.4 8.3 7.8 8.8 8.6 8.2 9.4 8.4 7.8
1970 1971 1972 1973 1974 1975 1976 1977 1978	838.6 903.1 992.6 1,110.5 1,222.7 1,334.9 1,474.7 1,632.5 1,836.7 2,059.5	103.1 101.7 123.6 132.4 151.0 147.6 172.3 197.5 229.4 268.7	735.5 801.4 869.0 978.1 1,071.7 1,187.3 1,302.3 1,435.0 1,607.3 1,790.9	666.1 721.0 791.5 875.2 957.5 1,061.3 1,179.6 1,309.7 1,465.0 1,633.4	648.3 701.6 770.2 852.0 932.9 1,033.8 1,151.3 1,277.8 1,427.6 1,591.2	15.2 16.6 18.1 19.8 21.2 23.7 23.9 27.0 31.9 36.2	2.6 2.8 3.2 3.4 3.4 3.8 4.4 4.8 5.4 6.0	69.4 80.4 77.5 102.9 114.2 125.9 122.8 125.3 142.4 157.5	90.6 90.0 91.1 89.5 89.3 89.4 90.6 91.3 91.1 91.2	88.1 87.5 88.6 87.1 87.0 87.1 88.4 89.0 88.8	9.4 10.0 8.9 10.5 10.7 10.6 9.4 8.7 8.9 8.8
1980 1981 1982 1983 1984 1985 1986 1987 1988	2,301.5 2,582.3 2,766.8 2,952.2 3,268.9 3,496.7 3,696.0 3,924.4 4,231.2 4,557.5	298.9 345.2 354.1 352.3 377.4 417.3 437.2 489.1 504.9 566.1	2,002.7 2,237.1 2,412.7 2,599.8 2,891.5 3,079.3 3,258.8 3,435.3 3,726.3 3,991.4	1,806.4 2,000.4 2,148.8 2,372.9 2,595.2 2,825.7 3,012.4 3,211.9 3,469.7 3,726.4	1,755.8 1,939.5 2,075.5 2,288.6 2,501.1 2,717.6 2,896.7 3,097.0 3,350.1 3,594.5	43.6 49.3 59.5 69.2 77.0 89.4 94.5 91.7 94.0 103.9	6.9 11.5 13.8 15.1 17.1 18.8 21.1 23.2 25.6 28.0	196.3 236.7 263.9 226.9 296.3 253.6 246.5 223.4 256.6 265.0	90.2 89.4 89.1 91.3 89.8 91.8 92.4 93.5 93.1	87.7 86.7 86.0 88.0 86.5 88.3 88.9 90.2 89.9 90.1	9.8 10.6 10.9 8.7 10.2 8.2 7.6 6.5 6.9
1990	4,846.7 5,031.5 5,347.3 5,568.1 5,874.8 6,200.9 6,591.6 7,000.7 7,525.4 7,910.8	592.7 586.6 610.5 646.5 690.5 743.9 832.0 926.2 1,026.4	4,254.0 4,444.9 4,736.7 4,921.6 5,184.3 5,457.0 5,759.6 6,074.6 6,498.9 6,803.3	3,977.3 4,131.7 4,388.7 4,636.2 4,913.6 5,170.8 5,478.5 5,794.2 6,157.5 6,595.5	3,835.5 3,980.1 4,236.9 4,483.6 4,750.8 4,987.3 5,273.6 5,570.6 5,918.5 6,342.8	111.3 115.0 111.3 107.0 113.0 130.6 147.3 159.7 169.5	30.6 36.7 40.5 45.6 49.8 52.9 57.6 63.9 69.5	276.7 313.2 348.1 285.4 270.7 286.3 281.1 280.4 341.5 207.8	93.5 93.0 92.7 94.2 94.8 95.1 95.4 94.7 96.9	90.2 89.5 89.4 91.1 91.6 91.4 91.7 91.7 93.2	6.5 7.0 7.3 5.8 5.2 5.2 4.9 4.6 5.3 3.1
2000	8,559.4 8,883.3 9,060.1 9,378.1 9,937.2 10,485.9 11,268.1 11,894.1 12,238.8 12,072.1	1,232.3 1,234.8 1,050.4 1,000.3 1,047.8 1,208.6 1,352.4 1,490.9 1,432.4 1,107.6	7,327.2 7,648.5 8,009.7 8,377.8 8,889.4 9,277.3 9,915.7 10,403.1 10,806.4 10,964.5	7,114.1 7,443.5 7,727.5 8,088.0 8,585.7 9,149.6 9,680.7 10,224.3 10,520.0 10,461.8	6,830.4 7,148.8 7,439.2 7,804.0 8,285.1 8,819.0 9,322.7 9,826.4 10,129.9 10,092.6	200.3 203.7 191.3 182.7 190.3 210.8 230.1 256.8 237.7 214.3	83.4 91.0 97.0 101.3 110.3 119.8 128.0 141.0 152.3 154.9	213.1 204.9 282.2 289.8 303.7 127.7 235.0 178.9 286.4 502.7	97.1 97.3 96.5 96.5 96.6 98.6 97.6 98.3 97.3	93.2 93.5 92.9 93.2 95.1 94.0 94.5 93.7 92.0	2.9 2.7 3.5 3.5 3.4 1.4 2.4 1.7 2.7
2006: I II IV	11,026.7 11,204.0 11,336.9 11,504.8	1,321.5 1,340.2 1,354.3 1,393.5	9,705.2 9,863.8 9,982.5 10,111.2	9,493.5 9,618.2 9,754.9 9,856.4	9,148.2 9,266.6 9,391.8 9,484.1	223.9 223.7 233.5 239.2	121.4 127.8 129.6 133.2	211.7 245.6 227.7 254.8	97.8 97.5 97.7 97.5	94.3 93.9 94.1 93.8	2.2 2.5 2.3 2.5
2007: I II IV	11,706.9 11,823.4 11,945.6 12,100.3	1,459.5 1,481.8 1,500.7 1,521.9	10,247.4 10,341.7 10,445.0 10,578.4	10,038.3 10,158.2 10,275.6 10,425.0	9,658.5 9,762.5 9,865.6 10,019.2	242.1 256.2 268.2 260.7	137.8 139.4 141.8 145.0	209.1 183.5 169.4 153.5	98.0 98.2 98.4 98.5	94.3 94.4 94.5 94.7	2.0 1.8 1.6 1.5
2008: I II IV	12,142.2 12,292.9 12,286.6 12,233.5	1,531.8 1,326.2 1,437.3 1,434.3	10,610.4 10,966.7 10,849.3 10,799.1	10,484.1 10,592.2 10,613.6 10,389.9	10,095.1 10,194.7 10,220.1 10,009.8	239.8 243.9 238.3 228.8	149.2 153.6 155.2 151.3	126.3 374.4 235.7 409.2	98.8 96.6 97.8 96.2	95.1 93.0 94.2 92.7	1.2 3.4 2.2 3.8
2009: I II IV P	11,952.7 12,048.8 12,083.9 12,203.1	1,187.3 1,082.6 1,086.1 1,074.4	10,765.4 10,966.2 10,997.8 11,128.6	10,362.3 10,370.5 10,502.8 10,611.8	9,987.7 9,999.3 10,132.9 10,250.5	220.4 216.7 215.5 204.7	154.2 154.5 154.4 156.6	403.1 595.7 495.0 516.9	96.3 94.6 95.5 95.4	92.8 91.2 92.1 92.1	3.7 5.4 4.5 4.6

 $<sup>^{\</sup>rm 1}$  Consists of nonmortgage interest paid by households.  $^{\rm 2}$  Percents based on data in millions of dollars.

Source: Department of Commerce (Bureau of Economic Analysis).

TABLE B-31. Total and per capita disposable personal income and personal consumption expenditures, and per capita gross domestic product, in current and real dollars, 1960-2009

[Quarterly data at seasonally adjusted annual rates, except as noted]

		)isposable pe	ersonal incom	ne	Perso	nal consump	ntion expendit	tures	Gross d		
Year or quarter	To (billions o		Per c (doll	apita lars)	To (billions o	tal of dollars)	Per ca (doll	apita ars)	per c	duct apita lars)	Population (thou-
	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	Current dollars	Chained (2005) dollars	sands) 1
1960 1961 1962 1963	365.2 381.6 404.9 425.0	1,963.9 2,030.8 2,129.6 2,209.5	2,020 2,077 2,170 2,245	10,865 11,052 11,413 11,672	331.8 342.2 363.3 382.7	1,784.4 1,821.2 1,911.2 1,989.9	1,836 1,862 1,947 2,022	9,871 9,911 10,243 10,512	2,912 2,965 3,139 3,263	15,661 15,766 16,466 16,940	180,760 183,742 186,590 189,300
1964 1965 1966 1967 1968	462.3 497.8 537.4 575.1 624.7 673.8	2,368.7 2,514.7 2,647.3 2,763.5 2,889.2 2,981.4	2,408 2,562 2,733 2,894 3,112 3,324	12,342 12,939 13,465 13,904 14,392 14,706	411.5 443.8 480.9 507.8 558.0 605.1	2,108.4 2,241.8 2,369.0 2,440.0 2,580.7 2,677.4	2,022 2,144 2,284 2,446 2,555 2,780 2,985	10,985 11,535 12,050 12,276 12,856 13,206	3,458 3,700 4,007 4,188 4,532 4,856	17,675 18,576 19,559 19,836 20,590 21,021	191,927 194,347 196,599 198,752 200,745 202,736
1970	735.5 801.4 869.0 978.1 1,071.7 1,187.3 1,302.3 1,435.0	3,108.8 3,249.1 3,406.6 3,638.2 3,610.2 3,691.3 3,838.3 3,970.7	3,586 3,859 4,140 4,615 5,010 5,497 5,972 6,514	15,158 15,644 16,228 17,166 16,878 17,091 17,600 18,025	648.3 701.6 770.2 852.0 932.9 1,033.8 1,151.3 1,277.8	2,740.2 2,844.6 3,019.5 3,169.1 3,142.8 3,214.1 3,393.1 3,535.9	3,161 3,378 3,669 4,020 4,362 4,786 5,279 5,801	13,361 13,696 14,384 14,953 14,693 14,881 15,558 16,051	5,063 5,425 5,897 6,522 7,010 7,583 8,366 9,216	20,820 21,249 22,140 23,200 22,861 22,592 23,575 24,412	205,089 207,692 209,924 211,939 213,898 215,981 218,086 220,289
1977 1978 1979 1980	1,607.3 1,790.9 2,002.7	4,156.5 4,253.8 4,295.6	7,220 7,956 8,794	18,670 18,897 18,863	1,427.6 1,591.2 1,755.8	3,691.8 3,779.5 3,766.2	6,413 7,069 7,710	16,583 16,790 16,538	10,303 11,382 12,243	25,503 26,010 25,640	222,629 225,106 227,726
1981 1982 1983 1984 1985 1986 1987 1988	2,237.1 2,412.7 2,599.8 2,891.5 3,079.3 3,258.8 3,435.3 3,726.3 3,991.4	4,410.0 4,506.5 4,655.7 4,989.1 5,144.8 5,315.0 5,402.4 5,635.6 5,785.1	9,726 10,390 11,095 12,232 12,911 13,540 14,146 15,206 16,134	19,173 19,406 19,868 21,105 21,571 22,083 22,246 22,997 23,385	1,939.5 2,075.5 2,288.6 2,501.1 2,717.6 2,896.7 3,097.0 3,350.1 3,594.5	3,823.3 3,876.7 4,098.3 4,315.6 4,540.4 4,724.5 4,870.3 5,066.6 5,209.9	8,432 8,938 9,766 10,580 11,394 12,036 12,753 13,670 14,530	16,623 16,694 17,489 18,256 19,037 19,630 20,055 20,675 21,060	13,594 14,009 15,084 16,629 17,683 18,531 19,504 20,813 22,160	26,030 25,282 26,186 27,823 28,717 29,443 30,115 31,069 31,877	230,008 232,218 234,333 236,394 238,506 240,683 242,843 245,061 247,387
1990 1991 1992 1993 1994 1995 1996 1997 1998	4,254.0 4,444.9 4,736.7 4,921.6 5,184.3 5,457.0 5,759.6 6,074.6 6,498.9 6,803.3	5,896.3 5,945.9 6,155.3 6,258.2 6,459.0 6,651.6 6,870.9 7,113.5 7,538.8 7,766.7	17,004 17,532 18,436 18,909 19,678 20,470 21,355 22,255 23,534 24,356	23,568 23,453 23,958 24,044 24,517 24,951 25,475 26,061 27,299 27,805	3,835.5 3,980.1 4,236.9 4,483.6 4,750.8 4,987.3 5,273.6 5,570.6 5,918.5 6,342.8	5,316.2 5,324.2 5,505.7 5,701.2 5,918.9 6,079.0 6,291.2 6,523.4 6,865.5 7,240.9	15,331 15,699 16,491 17,226 18,033 18,708 19,553 20,408 21,432 22,707	21,249 21,000 21,430 21,904 22,466 22,803 23,325 23,899 24,861 25,923	23,185 23,635 24,686 25,616 26,893 27,813 29,062 30,526 31,843 33,486	32,112 31,614 32,255 32,747 33,671 34,112 34,977 36,102 37,238 38,592	250,181 253,530 256,922 260,282 263,455 266,588 269,714 272,958 276,154 279,328
2000	7,327.2 7,648.5 8,009.7 8,377.8 8,889.4 9,277.3 9,915.7 10,403.1 10,806.4 10,964.5	8,161.5 8,360.1 8,637.1 8,853.9 9,155.1 9,277.3 9,650.7 9,860.6 9,911.3 10,035.3	25,944 26,805 27,799 28,805 30,287 31,318 33,157 34,445 35,450 35,659	28,899 29,299 29,976 30,442 31,193 31,318 32,271 32,648 32,514 32,637	6,830.4 7,148.8 7,439.2 7,804.0 8,285.1 8,819.0 9,322.7 9,826.4 10,129.9 10,092.6	7,608.1 7,813.9 8,021.9 8,247.6 8,532.7 8,819.0 9,073.5 9,313.9 9,290.9 9,237.3	24,185 25,054 25,819 26,832 28,228 29,771 31,174 32,535 33,231 32,823	26,939 27,385 27,841 28,357 29,072 29,771 30,341 30,838 30,479 30,042	35,237 36,049 36,935 38,310 40,435 42,664 44,805 46,611 47,375 46,372	39,750 39,768 40,096 40,711 41,784 42,664 43,391 43,884 43,671 42,242	282,418 285,335 288,133 290,845 293,502 296,229 299,052 302,025 304,831 307,484
2006: I II III IV	9,705.2 9,863.8 9,982.5 10,111.2	9,533.8 9,617.3 9,662.5 9,788.8	32,572 33,031 33,341 33,680	31,997 32,205 32,272 32,606	9,148.2 9,266.6 9,391.8 9,484.1	8,986.6 9,035.0 9,090.7 9,181.6	30,703 31,031 31,367 31,591	30,161 30,255 30,362 30,584	44,246 44,698 44,931 45,340	43,348 43,407 43,305 43,505	297,959 298,625 299,411 300,213
2007: I II III IV	10,247.4 10,341.7 10,445.0 10,578.4	9,830.2 9,842.7 9,883.9 9,886.2	34,055 34,287 34,540 34,893	32,668 32,633 32,684 32,610	9,658.5 9,762.5 9,865.6 10,019.2	9,265.1 9,291.5 9,335.6 9,363.6	32,097 32,367 32,624 33,049	30,790 30,806 30,871 30,886	45,846 46,407 46,890 47,294	43,534 43,777 44,050 44,171	300,913 301,617 302,406 303,166
2008: I II IV	10,610.4 10,966.7 10,849.3 10,799.1	9,826.8 10,059.0 9,838.3 9,920.4	34,925 36,022 35,551 35,304	32,345 33,041 32,238 32,431	10,095.1 10,194.7 10,220.1 10,009.8	9,349.6 9,351.0 9,267.7 9,195.3	33,228 33,486 33,489 32,724	30,774 30,715 30,368 30,061	47,312 47,620 47,666 46,904	43,997 44,065 43,662 42,963	303,810 304,445 305,177 305,890
2009:                  V p	10,765.4 10,966.2 10,997.8 11,128.6	9,926.4 10,077.5 10,042.3 10,095.1	35,124 35,709 35,728 36,071	32,387 32,815 32,625 32,721	9,987.7 9,999.3 10,132.9 10,250.5	9,209.2 9,189.0 9,252.6 9,298.5	32,587 32,560 32,919 33,225	30,047 29,922 30,059 30,139	46,258 46,080 46,268 46,880	42,172 42,011 42,146 42,639	306,496 307,101 307,815 308,522

<sup>1</sup> Population of the United States including Armed Forces overseas; includes Alaska and Hawaii beginning in 1960. Annual data are averages of quarterly data. Quarterly data are averages for the period.

Source: Department of Commerce (Bureau of Economic Analysis and Bureau of the Census).

## TABLE B-32. Gross saving and investment, 1960-2009

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

							Gross	saving					
						Net s	aving				Consum	ption of fixe	d capital
Voo	r or guartor				Net priva	ite saving		Net g	overnment s	saving			
rea	r or quarter	Total gross saving	Total net saving	Total	Personal saving	Undis- tributed corporate profits <sup>1</sup>	Wage accruals less disburse- ments	Total	Federal	State and local	Total	Private	Govern- ment
1961 1962 1963 1964 1965 1966 1966 1966 1966 1966 1966 1967 1968 1969 1970 1971 1972 1976 1977 1978 1979 1980 1991 1981 1982 1993 1994 1995 1996 1991 1999 1999 1999 1999 1999		111.3 114.3 124.9 133.2 143.4 158.5 168.7 170.6 182.0 198.4 192.8 209.2 237.3 292.2 301.8 296.9 342.0 396.7 476.3 533.2 542.7 646.1 621.5 602.4 738.4	54.7 56.1 64.3 69.8 77.0 87.7 92.3 87.6 91.6 99.3 84.5 91.5 110.1 151.4 138.1 106.5 133.8 164.9 214.9 234.9 234.9 279.0 272.7 226.4 277.7 187.9 180.4 24.9 25.2 277.7 277.7 276.4 277.7 277.7 276.4 277.5 349.6 431.8 561.9 613.6 439.4 259.3 439.4 259.3 439.4 259.3 259.3 269.3 279.0 27	43.3 49.3 56.7 78.0 82.7 77.0 92.9 113.7 119.4 147.5 143.3 174.6 180.1 197.9 225.2 235.3 246.5 301.9 325.4 426.5 301.9 325.4 426.5 348.5 427.7 451.2 491.8 461.6 487.7 557.1 585.7 575.1 585.7 575.3 473.0 389.9 473.0 474.9 474.9 474.9 474.9 474.9 474.9 475.9 475.9 475.9 476.9 4	26.3 31.9 33.5 33.1 40.5 42.7 44.3 54.2 52.5 52.5 52.5 69.4 80.4 77.5 102.9 112.9 122.8 125.3 142.4 157.5 196.3 226.9 296.3 226.9 296.3 223.4 246.5 246.5 276.7 281.1 28	16.9 17.4 23.2 25.7 29.2 29.2 35.3 38.0 35.8 34.1 30.3 32.9 44.6 29.1 48.7 57.3 72.6 82.8 77.8 56.2 61.5 120.0 138.0 159.5 169.7 199.4 243.9 272.3 308.2 212.6 11.6 20.1 176.3 309.2 212.6 200.1 176.3 309.2 212.6 200.1 176.3 309.2 212.6 309.2 390.5 486.4 430.3 322.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3 308.2 378.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	11.4 6.8 7.7 11.0 7.3 9.8 10.00 -2.3 5.1 16.5 -8.4 -22.2 -3.9 -5.2 -68.2 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0 -1.0	7.1 2.6 2.4 5.3 9 3.2 2.3 -2.4 8.3 -14.5 -70.6 -56.8 -135.3 -176.2 -171.5 -28.9 -14.0 -14.9 -13.9 -14.9 -14.9 -13.9 -14.	4.3 4.3 5.2 5.7 6.5 7.8 7.5 8.0 7.1 6.5 7.5 15.6 15.7 9.3 7.4 13.1 18.7 7.6 -2.2 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 23.9 4.9 24.9 25.9 26.9 27.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28	56.6 58.2 60.6 63.3 66.4 70.7 76.5 82.9 90.4 99.2 117.8 127.2 140.8 127.2 140.8 163.7 190.4 208.9 344.1 393.3 343.5 507.1 651.5 691.2 724.4 778.0 651.5 691.2 724.4 778.0 819.2 869.5 912.5 963.8 1.090.4 1.184.3 1.256.2 1.305.0 1.355.1 1.355.1 1.432.8 1.355.1 1.432.8 1.560.7 1.432.8 1.560.7 1.760.0 1.863.7	41.6 42.6 44.1 45.9 48.3 51.9 56.5 61.6 67.4 74.5 97.7 109.5 127.8 99.7 120.2 244.5 186.1 212.0 244.5 186.1 212.0 244.5 186.1 212.0 244.5 186.1 212.0 244.5 186.1 212.0 244.5 186.1 212.0 244.5 186.1 246.1	15.0 15.6 16.5 17.5 18.1 18.9 20.0 24.7 6 28.2 2 29.4 31.3 35.9 342.6 6 45.6 49.5 54.4 61.8 69.9 92.7 7.1 18.9 121.8 130.8 130.8 144.5 151.6 69.2 174.1 179.0 187.2 197.5 204.6 310.9 3250.6 2693.3 290.4 310.9 3250.6 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.6 130.9 3250.9 130.9 3250.9 130.9 3250.9 130.9
2006:	        V	2,148.9 2,159.2 2,161.2 2,228.4 2,036.1	530.9 511.0 485.9 527.1 309.3	675.6 677.2 659.0 654.1 477.4	211.7 245.6 227.7 254.8 209.1	483.9 431.5 431.4 374.3 293.3	-20.0 .0 .0 25.0 -25.0	-144.7 -166.2 -173.1 -127.0 -168.1	-207.3 -229.4 -215.5 -163.0 -200.9	62.6 63.2 42.4 35.9 32.8	1,618.0 1,648.2 1,675.2 1,701.3	1,538.4 1,357.4 1,381.1 1,403.2 1,423.9 1,443.1	260.6 267.1 272.0 277.4 283.7
	      V	2,096.8 2,028.7 1,999.3	347.4 257.5 206.5 89.9	533.8 495.9 472.9 543.4	183.5 169.4 153.5 126.3	350.3 326.5 319.4 417.1	.0 .0 .0	-186.3 -238.4 -266.3 -453.5	-221.3 -258.8 -265.0 -433.5	34.9 20.3 -1.3	1,749.4 1,771.2 1,792.8 1,813.6	1,461.4 1,478.7 1,495.1 1,510.6	288.0 292.5 297.6 303.0
	      V	1,780.1 1,842.4 1,770.5	-55.5 -15.8 -110.5	767.0 709.0 619.7	374.4 235.7 409.2	392.6 473.2 230.5	.0 .0 –20.0	-822.5 -724.8 -730.2	-796.9 -665.7 -674.1	-20.1 -25.5 -59.0 -56.1	1,835.6 1,858.2 1,881.0	1,527.0 1,544.4 1,562.6	308.5 313.8 318.4
2009:	          <i>p</i>	1,595.3 1,530.7 1,491.7	-288.3 -333.3 -359.0	717.4 960.2 983.0	403.1 595.7 495.0 516.9	294.2 364.5 488.0	20.0 .0 .0 .0	-1,005.7 -1,293.5 -1,342.0	-969.1 -1,268.9 -1,327.0	-36.6 -24.6 -14.9	1,883.6 1,864.0 1,850.7 1,856.4	1,561.3 1,540.5 1,525.5 1,526.3	322.3 323.5 325.2 330.1

 $<sup>^{\</sup>rm 1}$  With inventory valuation and capital consumption adjustments. See next page for continuation of table.

Table B-32. Gross saving and investment, 1960-2009—Continued

[Billions of dollars, except as noted; quarterly data at seasonally adjusted annual rates]

	(	Gross dome	estic inves tions, and	tment, ca net lendir	pital acco	unt					Addenda:	:		
		Gross do	mestic inv	estment/		Net	Statis-		Gross g	overnment	saving		Gross	Net
Year or quarter	Total	Total	Gross private domes- tic invest- ment	Gross govern- ment invest- ment <sup>3</sup>	Capital ac- count trans- actions (net) 4	lending or net borrow- ing (–), NIPA 2, 5	tical dis- crep- ancy	Gross private saving	Total	Federal	State and local	Net domes- tic invest- ment	saving as a percent of gross national income	saving as a percent of gross national income
1960	110.3 113.7 125.2 160.0 160.0 174.9 175.1 186.4 201.3 300.2 246.2 246.2 300.2 246.2 300.2 246.2 300.2 246.2 300.2 588.0 682.6 662.1 7777.1 882.0 662.1 1,042.3 1,043.3	107.2 109.5 121.4 127.4 136.7 153.8 171.1 171.6 184.8 199.7 196.0 219.9 250.2 291.3 305.7 293.3 305.7 293.3 305.7 293.3 629.5 687.2 875.0	78.9 78.2 88.1 93.8 102.1 118.2 131.3 128.6 141.2 156.4 152.4 158.2 207.6 2249.4 230.2 2361.3 438.0 479.3 572.4 517.2 564.3 736.6 874.9 801.9 8864.8 953.3 1,097.3 1,144.0 1,240.2 1,388.7 1,751.8 1,641.5 1,772.2 1,684.0 1,729.7 1,968.6 2,172.2 2,288.5 1,772.2 2,288.5	28.3 31.3 33.6 34.6 35.6 43.0 35.6 43.0 43.0 43.0 43.0 43.0 43.0 43.0 43.0	-0.1 -1.1 -1.2 -2.2 -2.4 -2.2 -4.4 -2.1 1.0 5.2 1.1 1.3 8.8 8.3 -1.1 -1.1 -1.1 -1.1 1.1 1.1 1.1 1.1 1.1	3.2 4.2 3.8 4.9 7.5 6.2 3.8 3.5 1.6 3.7 4.0 8.9 9.12.6 6.0 19.8 7.12.6 10.9 11.1 11.1 11.1 11.1 11.1 11.1 11.1	-1.0 -6 -3 -3 -8 -8 -8 -8 -1.5 -6 -2 -4.5 -3 -9 -9.5 -1 -1.0 -1.0 -7.8 -7.1 -2.2 -6 -7.8 -7.1 -2.2 -6 -7.8 -7.1 -2.2 -6 -7.8 -7.1 -2.2 -6 -7.8 -7.1 -7.2 -7.1 -7.2 -7.2 -7.2 -7.2 -7.3 -7.3 -7.1 -7.3 -7.3 -7.1 -7.3 -7.3 -7.1 -7.3 -7.3 -7.1 -7.3 -7.3 -7.1 -7.3 -7.3 -7.3 -7.1 -7.3 -7.3 -7.3 -7.3 -7.3 -7.3 -7.3 -7.3	94.9 91.9 100.8 1104.7 118.0 129.8 151.5 154.0 157.2 217.1 257.1 325.1 335.1 336.1 336.1 337.1 437.1 437.1 437.1 1,036.6 802.0 783.8 814.0 802.0 783.8 1,109.7 1,080.0 1,148.6 1,130.3 1,146.5 1,130.3 1,146.5	26.4 22.4 24.1 28.4 28.6 30.0 19.1 28.0 20.2 35.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -28.2 30.7 -30.8 -60.6 -63.6 -74.5 -30.8 -80.8 -30	17.7 13.4 13.9 17.4 13.2 15.9 15.3 15.3 15.3 15.2 23.9 16 -12.2 -8.3 3.7 -50.9 -32.3 -23.1 -3.9 -26.6 -23.0 -97.7 -135.6 -148.0 -149.0 -97.7 -146.4 -227.9 -202.4 -140.3 -241.6 -230.9 -242.9 -	87 90 0 103 11.1 12.1 12.8 14.6 6 15.8 17.3 30.0 0 22.7 22.7 23.5 7 43.2 2 45.2 12.7 9 66.3 4 72.0 78.7 7 72.0 78.7 7 11.0 12.8 86.4 3 110.2 12.7 9 86.4 3 110.2 12.7 9 7 17.1 17.1 143.9 151.0 0 17.2 17.3 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5	50.6 6.6 51.3 3.6 60.9 50.6 64.1 70.3 3.8 31.1 150.6 6.9 50.1 150.5 150.	21.0 20.8 21.2 21.4 21.5 21.5 20.5 20.1 18.6 18.6 19.2 21.1 18.2 19.6 20.8 19.5 20.7 18.7 18.7 18.6 17.6 17.6 16.0 14.9 14.6 15.6 16.0 14.9 14.6 15.6 16.2 18.6 18.6 18.6 18.6 18.6 18.6 18.6 18.6	10.3 10.2 10.9 11.2 11.5 12.1 11.7 10.5 10.9 10.9 9.2 6.5 7.2 8.1 8.9 9.2 9.2 8.1 5.7 5.7 5.7 5.7 5.7 5.7 5.7 6.5 7.1 6.5 6.5 6.5 7.1 6.5 6.5 7.1 6.5 6.5 6.5 7.1 6.5 6.5 6.5 7.1 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5 6.5
2009 <i>P</i>	1,956.7 1,968.5 1,907.7 1,982.4	2,138.4 2,746.2 2,779.5 2,761.1 2,722.1	1,622.9 2,336.5 2,352.1 2,333.5 2,286.5	515.5 409.7 427.4 427.6 435.6	7.2 4.3 2.4 2.8	-796.7 -815.4 -855.8 -742.5	-192.2 -190.7 -253.4 -246.0	2,033.0 2,058.2 2,062.2 2,078.0	115.9 101.0 98.9 150.4	-103.5 -123.4 -107.7 -54.2	219.4 224.4 206.6 204.7	274.7 1,128.2 1,131.3 1,085.8 1,020.8	16.0 15.9 15.7 16.0	3.9 3.8 3.5 3.8
2007: I II IV	1,914.9 1,999.7 2,093.6 2,093.3	2,714.3 2,762.3 2,778.4 2,745.2	2,267.2 2,302.0 2,311.9 2,272.9	447.1 460.2 466.6 472.3	2.5 .8 2.8 2.7	-801.8 -763.3 -687.6 -654.6	-121.1 -97.1 64.9 94.0	1,920.5 1,995.1 1,974.6 1,968.0	115.6 101.7 54.0 31.3	-90.6 -109.6 -145.5 -149.8	206.2 211.2 199.6 181.1	987.5 1,012.9 1,007.2 952.4	14.6 14.8 14.2 13.9	2.2 2.5 1.8 1.4
2008: I II IV	1,973.2 1,906.8 1,910.6 1,909.9	2,690.7 2,660.2 2,647.8 2,530.9	2,214.8 2,164.6 2,142.7 2,022.1	475.9 495.5 505.0 508.9	2.8 3.0 -11.6 4.0	-720.3 -756.4 -725.5 -625.1	69.8 126.7 68.3 139.4	2,054.0 2,294.1 2,253.3 2,182.3	-150.5 -514.0 -411.0 -411.8	-316.2 -677.3 -544.7 -553.0	165.7 163.3 133.7 141.2	877.1 824.6 789.6 650.0	13.2 12.3 12.6 12.4	.6 4 1 8
2009: I II IV P	1,780.8 1,692.4 1,654.9	2,190.3 2,082.0 2,080.4 2,201.0	1,689.9 1,561.5 1,556.1 1,684.0	500.4 520.4 524.3 517.0	3.1 3.0 2.9	-412.6 -392.5 -428.4	185.4 161.7 163.2	2,278.7 2,500.7 2,508.5	-683.4 -970.0 -1,016.8	-846.6 -1,144.9 -1,201.0	163.2 174.9 184.2	306.7 218.0 229.7 344.6	11.3 10.9 10.5	-2.0 -2.4 -2.5

Source: Department of Commerce (Bureau of Economic Analysis).

<sup>2</sup> National income and product accounts (NIPA).
3 For details on government investment, see Table B–20.
4 Consists of capital transfers and the acquisition and disposal of nonproduced nonfinancial assets.
5 Prior to 1982, equals the balance on current account, NIPA (see Table B–24).

TABLE B-33. Median money income (in 2008 dollars) and poverty status of families and people, by race, selected years, 1996-2008

		1 1	Fami	lies <sup>1</sup>		7	People		Median i	money inco	me (in 200	B dollars)
		Madian		Below pov	verty level		povert		от ре	money inco cople 15 yea with in	ars old and come <sup>2</sup>	over
Year	Number	Median money income	То	tal	Fen house	nale holder			Ma	iles	Fem	nales
	(mil- lions)	(in 2008 dol- lars) <sup>2</sup>	Number (mil- lions)	Percent	Number (mil- lions)	Percent	Number (mil- lions)	Percent	All people	Year- round full-time workers	All people	Year- round full-time workers
ALL RACES 1996 1997 1998 1998 1999 2000 4 2001 2002 2003 2004 2005 2006 2006 2007 2008	70.2 70.9 71.6 73.2 73.8 74.3 75.6 76.2 76.9 77.4 78.5 77.9 78.9	\$57,801 59,613 61,653 63,099 63,430 62,519 61,852 61,671 61,623 61,976 62,372 63,712 61,521	7.7 7.3 7.2 6.8 6.4 6.8 7.2 7.6 7.7 7.7 7.7 7.6 8.1	11.0 10.3 10.0 9.3 8.7 9.2 9.6 10.0 10.2 9.9 9.8 9.8 10.3	4.2 4.0 3.8 3.6 3.3 3.5 3.6 4.0 4.1 4.1 4.2	32.6 31.6 29.9 27.8 25.4 26.4 26.5 28.0 28.3 28.7 28.3 28.7	36.5 35.6 34.5 32.8 31.6 32.9 34.6 35.9 37.0 37.0 36.5 37.3 39.8	13.7 13.3 12.7 11.9 11.3 11.7 12.1 12.5 12.7 12.6 12.3 12.5 13.2	\$32,568 33,723 34,947 35,268 35,437 35,391 34,93 34,784 34,493 34,455 34,472 33,161	\$45,829 47,146 47,822 48,393 48,625 48,812 48,480 48,587 47,495 46,529 48,010 48,000 47,779	\$17,511 18,329 19,035 19,776 20,084 20,205 20,121 20,205 20,138 20,487 21,373 21,726 20,867	\$34,073 34,815 35,426 35,362 36,412 36,995 37,066 37,055 36,608 37,364 37,557 36,688
WHITE 1996 1997 1998 1999 2000 4 2001	58.9 59.5 60.1 61.1 61.3 61.6	61,158 62,536 64,669 66,004 66,302 65,754	5.1 5.0 4.8 4.4 4.3 4.6	8.6 8.4 8.0 7.3 7.1 7.4	2.3 2.3 2.1 1.9 1.8 1.9	27.3 27.7 24.9 22.5 21.2 22.4	24.7 24.4 23.5 22.2 21.6 22.7	11.2 11.0 10.5 9.8 9.5 9.9	34,092 34,930 36,469 37,039 37,255 36,776	47,472 48,310 49,067 50,670 50,328 49,607	17,711 18,448 19,282 19,838 20,104 20,251	34,651 35,405 36,018 36,181 37,448 37,517
Alone 6 2002 2003 2004 5 2005 2006 2007 2007 2008	62.3 62.6 63.1 63.4 64.1 63.6 64.2	65,386 65,286 64,657 65,420 65,440 66,903 65,000	4.9 5.1 5.3 5.1 5.1 5.0 5.4	7.8 8.1 8.4 8.0 8.0 7.9 8.4	2.0 2.2 2.3 2.3 2.4 2.3 2.4	22.6 24.0 24.7 25.3 25.1 24.7 25.2	23.5 24.3 25.3 24.9 24.4 25.1 27.0	10.2 10.5 10.8 10.6 10.3 10.5	36,363 35,977 35,729 35,490 36,140 36,491 35,120	49,518 49,335 48,554 48,192 49,051 49,050 49,924	20,152 20,396 20,175 20,590 21,445 21,879 20,950	37,580 37,686 37,309 37,609 37,937 38,139 37,210
Alone or in combination <sup>6</sup> 2002 2003 2004 <sup>5</sup> 2005 2006 2007 2008	63.0 63.5 64.0 64.3 65.0 64.4 65.0	65,166 65,094 64,500 65,208 65,352 66,702 64,804	5.0 5.2 5.4 5.2 5.2 5.2 5.2	7.9 8.1 8.5 8.1 8.0 8.0	2.1 2.2 2.3 2.4 2.4 2.4 2.4	22.6 24.2 24.8 25.5 25.0 24.8 25.4	24.1 25.0 26.1 25.6 25.2 25.9 27.9	10.3 10.6 10.9 10.7 10.4 10.6 11.3	36,283 35,891 35,651 35,406 35,959 36,377 35,013	49,448 49,261 48,429 48,021 48,982 48,980 49,755	20,113 20,359 20,140 20,535 21,399 21,818 20,921	37,566 37,672 37,266 37,530 37,899 38,104 37,177
BLACK 1996	8.5 8.4 8.5 8.7 8.7 8.8	36,241 38,257 38,788 41,156 42,105 40,860	2.2 2.0 2.0 1.9 1.7 1.8	26.1 23.6 23.4 21.8 19.3 20.7	1.7 1.6 1.6 1.5 1.3	43.7 39.8 40.8 39.2 34.3 35.2	9.7 9.1 9.1 8.4 8.0 8.1	28.4 26.5 26.1 23.6 22.5 22.7	22,534 24,205 25,487 26,414 26,685 26,106	37,080 35,976 36,240 38,965 38,120 38,821	16,086 17,453 17,330 19,093 19,856 19,801	30,049 30,448 31,480 32,487 32,195 33,197
Alone 6 2002 2003 2004 5 2005 2006 2007 2008	8.9 8.9 8.9 9.1 9.3 9.3	40,123 40,235 40,064 39,113 40,867 41,685 39,879	1.9 2.0 2.0 2.0 2.0 2.0 2.0 2.1	21.5 22.3 22.8 22.1 21.6 22.1 22.0	1.4 1.5 1.5 1.5 1.5 1.5	35.8 36.9 37.6 36.1 36.6 37.3 37.2	8.6 8.8 9.0 9.2 9.0 9.2 9.4	24.1 24.4 24.7 24.9 24.3 24.5 24.7	25,805 25,739 25,864 24,984 26,765 26,814 25,254	38,217 39,135 36,157 37,755 37,885 38,148 38,612	20,022 19,411 19,787 19,445 20,400 20,511 20,197	33,062 32,336 33,222 33,487 33,036 32,805 32,186
Alone or in combination <sup>6</sup> 2002 2003 2004 <sup>5</sup> 2005 2006 2007 2007 2008	9.1 9.1 9.3 9.3 9.5 9.5	40,254 40,514 40,261 39,256 41,135 41,767 39,936	2.0 2.0 2.1 2.1 2.0 2.1 2.1	21.4 22.1 22.8 22.0 21.5 22.0 21.9	1.5 1.5 1.5 1.5 1.5 1.6	35.7 36.8 37.6 36.2 36.4 37.2 37.1	8.9 9.1 9.4 9.5 9.4 9.7 9.9	23.9 24.3 24.7 24.7 24.2 24.4 24.6	25,742 25,679 25,890 24,935 26,777 26,783 25,118	38,258 39,176 36,146 37,657 37,921 38,193 38,365	19,952 19,363 19,773 19,405 20,359 20,469 20,203	33,156 32,399 33,276 33,491 33,087 32,889 32,204

<sup>1</sup> The term "family" refers to a group of two or more persons related by birth, marriage, or adoption and residing together. Every family must include a

Note: Poverty thresholds are updated each year to reflect changes in the consumer price index (CPI-U). For details see publication Series P–60 on the Current Population Survey and Annual Social and Economic Supplements.

Source: Department of Commerce (Bureau of the Census).

<sup>&</sup>lt;sup>2</sup> Current dollar median money income adjusted by consumer price index research series (CPI-U-RS).
<sup>3</sup> Reflects implementation of Census 2000—based population controls comparable with succeeding years.

<sup>&</sup>lt;sup>4</sup> Reflects household sample expansion.

<sup>5</sup> For 2004, figures are revised to reflect a correction to the weights in the 2005 Annual Social and Economic Supplement.
6 Data are for "white alone," for "white alone or in combination," for "black alone," and for "black alone or in combination." ("Black" is also "black or African American.") Beginning with data for 2002 the Current Population Survey allowed respondents to choose more than one race; for earlier years respondents could report only one race group.

#### POPULATION, EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table B-34. Population by age group, 1933-2009

[Thousands of persons]

			THIOC	isands of persor	Age (years)			
July 1	Total	Under 5	5–15	16–19	20–24	25–44	45-64	65 and over
1933	125,579	10,612	26,897	9,302	11,152	37,319	22,933	7,363
1939	130,880	10,418	25,179	9,822	11,519	39,354	25,823	8,764
1940	132,122	10,579	24,811	9,895	11,690	39,868	26,249	9,031
1941 1942	133,402 134,860	10,850 11,301 12,016	24,516 24,231	9,840 9,730	11,807 11,955	40,383 40.861	26,718 27,196	9,288 9,584
1943	136,739	12,016	24,093	9,607	11,955 12,064	41,420	27,196 27,671	9,867 10.147
1944 1945	138,397 139,928	12,524 12,979	23,949 23,907	9,561 9,361	12,062 12,036	42,016 42,521	28,138 28,630	10,147
1946	141,389 144,126	13,244 14,406	24,103	9,119 9,097	12,004	43,027 43,657	29,064 29,498	10,828
1947 1948	146,631	14,400	24,468 25,209	8,952	11,814 11,794	44,288	29,490	11,185 11,538
1949	149,188	15,607	25,852	8,788	11,700	44,916	30,405	11,921
1950 1951	152,271 154,878	16,410 17,333 17,312	26,721 27,279	8,542 8,446	11,680 11,552	45,672 46,103	30,849 31,362	12,397 12,803
1952	157,553	17,312	28,894	8,414	11,350	46.495	31,884	13,203
1953 1954	160,184 163,026	17,638 18,057	30,227 31,480	8,460 8,637	11,062 10,832	46,786 47,001	32,394 32,942	13,617 14,076
1955	165.931	18,566	32,682	8,744	10,714	47.194	33,506	14,525
1957	168,903 171,984	19,003 19,494	33,994 35,272	8,916 9,195	10,616 10,603	47,379 47,440	34,057 34,591	14,938 15,388
1958	174,882	19,887	36,445	9,543	10,756	47,337	35,109	15,806
1909	177,830 180.671	20,175 20.341	37,368 38,494	10,215 10.683	10,969 11,134	47,192 47.140	35,663	16,248 16.675
1960 1961	183,691	20,522	39,765	11,025	11,483	47,084	36,203 36,722	17,089
1962 1963	186,538 189,242	20,469 20,342	41,205 41,626	11,180 12,007	11,959 12,714	47,013 46,994	37,255 37,782	17,457 17,778
1964	191,889	20,165	42,297	12,736	13,269	46,958	38,338	18,127
1965 1966	194,303 196,560	19,824 19.208	42,938 43.702	13,516 14.311	13,746   14.050	46,912 47.001	38,916 39,534	18,451 18,755
1967	198,712	18,563	44,244	14,200	15,248	47,194	40,193	19,071
1968 1969	200,706 202,677	17,913 17,376	44,622 44,840	14,452 14,800	15,786 16,480	47,721 48,064	40,846 41,437	19,365 19,680
1970	205,052	17,166	44,816	15,289	17,202	48,473	41,999	20,107
1971	207,661 209,896	17,244 17,101	44,591	15,688	18,159	48,936	42,482	20,561
1972 1973	211,909 213,854	16,851	44,203 43,582	16,039 16,446	18,153   18,521	50,482 51,749	42,898 43,235	21,020 21,525
1974	213,854 215,973	16,487 16,121	42,989 42,508	16,769 17,017	18,975 19,527	53,051 54,302	43,522 43,801	22,061 22,696
1975 1976	218,035	15,617	42,099	17.194	19,986	55,852	44,008	23,278
1977 1978	220,239 222,585	15,564 15,735	41,298 40,428	17,276 17,288	20,499 20,946	57,561 59,400	44,150 44,286	23,892 24,502
1979	225,055	16,063	39,552	17,242	21,297	61,379	44,390	25,134
1980	227,726	16,451	38,838	17,167	21,590	63,470	44,504	25,707
1981	229,966 232,188	16,893 17,228	38,144 37,784	16,812 16,332	21,869 21,902	65,528 67,692	44,500 44,462	26,221 26,787
1983	234,307 236,348	17,547 17,695	37,526 37,461	15,823 15,295	21.844	69,733 71,735	44,474	27,361 27,878
1984 1985	230,348	17,842	37,461	15,295	21,737 21,478	73,673	44,547 44,602	27,878 28,416
1986	240,651	17,963	37,404	15,024	20,942 20,385	75,651	44,660 44,854	29,008
1987 1988	242,804 245,021	18,052 18,195	37,333 37,593	15,215 15,198	19,846	77,338 78,595	45,471	29,626 30,124
1989	247,342	18,508	37,972	14,913	19,442	79,943	45,882	30,682
1990 1991	250,132 253,493	18,856 19,208	38,632 39,349	14,466 13,992	19,323 19,414	81,291 82,844	46,316 46,874	31,247 31,812
1992	256,894	19,528	40,161	13,781	19,314	83,201	48,553	32,356
1993 1994	260,255 263,436	19,729 19,777	40,904 41,689	13,953 14,228	19,101 18,758	83,766 84,334	49,899 51,318	32,902 33,331
1995	266,557	19,627	42,510	14,522	18,391	84,933	52,806	33,769
1996 1997	269,667 272,912	19,408 19,233	43,172 43,833	15,057 15,433	17,965 17,992	85,527 85,737	54,396 56,283	34,143 34,402
1330	276,115	19,233 19,145	44,332	15,856	17,992 18,250	85,663	56,283 58,249	34,619
1999 2000 <sup>1</sup>	279,295 282,385	19,136 19,186	44,755 45,152	16,164 16,213	18,672 19,186	85,408 85,153	60,362 62,417	34,798 35,077
2000 <sup>1</sup> 2001 <sup>1</sup>	285,267	19,348	45,178	16,252	19,855	84,889	64,414	35,332
2002 1	288,028 290,704	19,534 19,770	45,125 45,040	16,302 16,349	20,367 20,769	84,557 84,202	66,553 68,623	35,591 35,952
2004 <sup>1</sup>	293,310	20,059	44,881	16,497	20,964	83,953	70,654	36,301
2005 1	295,994 298,766	20,301 20,436	44,709 44,533	16,632 16,945	21,038 21,072	83,776 83,730	72,786 74,787	36,752 37,264
2007 <sup>1</sup>	301,714	20,730	44,390	17,200	21,111	83,724	76,616	37,942
2009 1	304,483 307,226	21,006 21,268	44,320 44,371	17,200 17,330 17,319	21,204 21,424	83,676 83,565	78,077 79,651	38,870 39,628
	30,,220	2.,200	11,071	.,,,,,,,,,	,	00,000	, 0,001	55,520

<sup>&</sup>lt;sup>1</sup> Revised total population data are available as follows: 2000, 282,385; 2001, 285,309; 2002, 288,105; 2003, 290,820; 2004, 293,463; 2005, 296,186; 2006, 298,996; 2007, 302,004; 2008, 304,798; and 2009, 307,439.

Note: Includes Armed Forces overseas beginning with 1940. Includes Alaska and Hawaii beginning with 1950.

All estimates are consistent with decennial census enumerations.

Source: Department of Commerce (Bureau of the Census).

TABLE B-35. Civilian population and labor force, 1929-2009

[Monthly data seasonally adjusted, except as noted]

				vilian labor for	ce					
V	Civilian noninsti-			Employment			Not in	Civilian labor force	Civilian employ-	Unemploy- ment
Year or month	tutional population <sup>1</sup>	Total	Total	Agricultural	Non- agricultural	Un- employ- ment	labor force	participa- tion rate <sup>2</sup>	ment/ population ratio <sup>3</sup>	rate, civilian workers <sup>4</sup>
		Tho	usands of per	rsons 14 years	of age and ov	er			Percent	
1929		49,180	47,630	10,450	37,180	1,550				3.2
1933		51,590 55,230	38,760 45,750	10,090 9,610	28,670 36,140	12,830 9.480				24.9 17.2
1940	99.840	55.640	47.520	9,540	37 980	8.120	44,200	55.7	47.6	14.6
1941 1942 1943	99,900 98,640	55,910 56,410	50,350 53,750	9,100 9,250	41,250 44,500	5,560 2,660	43,990 42,230	56.0 57.2	50.4 54.5	9.9 4.7
1943 1944	94,640 93,220	55,540 54,630	54,470 53,960	9,080 8,950	45,390 45,010	1,070 670	39,100 38,590	58.7 58.6	57.6 57.9	1.9 1.2
1945 1946	94,090 103,070	53,860 57,520	52,820 55,250	8,580 8,320	44,240 46,930	1,040 2,270	40,230 45,550	57.2 55.8	56.1 53.6	1.9 3.9
1947	106,018	60,168	57,812	8,256	49,557	2,356	45,850	56.8	54.5	3.9
		Tho	usands of per	rsons 16 years	of age and ov	er				
1947 1948 1949	101,827 103,068 103,994	59,350 60,621 61,286	57,038 58,343 57,651	7,890 7,629 7,658	49,148 50,714 49,993	2,311 2,276 3,637	42,477 42,447 42,708	58.3 58.8 58.9	56.0 56.6 55.4	3.9 3.8 5.9
1950	104.995	62,208	58,918	7,160	51.758	3,288	42,787	59.2	56.1	5.3
1951 1952 <u>.</u>	104,621 105,231	62,017 62,138	59,961 60,250	6,726 6,500	53,235 53,749	2,055 1,883	42,604 43,093	59.2 59.0	57.3 57.3	3.3 3.0
1952 1953 <sup>5</sup> 1954	107,056 108,321	63,015 63,643	61,179 60,109	6,260 6,205	54,919 53,904	1,834 3,532	44,041 44,678	58.9 58.8	57.1 55.5	2.9 5.5
1955 1956	109,683 110,954	65,023 66,552	62,170 63,799	6,450 6,283	55,722 57,514	2,852 2,750	44,660 44,402	59.3 60.0	56.7 57.5	4.4 4.1
1957 1958	112,265 113,727	66,929 67,639	64,071 63,036	5,947 5,586	58,123 57,450	2,859 4,602	45,336 46,088	59.6 59.5	57.1 55.4	4.1 4.3 6.8
1959	115,329	68,369	64,630	5,565	59,065	3,740	46,960	59.3	56.0	5.5
1960 <sup>5</sup>	117,245 118,771	69,628 70,459	65,778 65,746	5,458 5,200	60,318 60,546	3,852 4,714	47,617 48,312	59.4 59.3	56.1 55.4	5.5 6.7
1961 1962 <sup>5</sup> 1963 1964	120,153 122,416 124,485	70,614 71,833 73,091	66,702 67,762 69,305	4,944 4,687 4,523	61,759 63,076 64,782	3,911 4,070 3,786	49,539 50,583 51,394	58.8 58.7 58.7	55.5 55.4 55.7	5.5 5.7 5.2
1965	126,513	74,455	71,088	4.361	66.726	3.366	52.058	58.9	56.2	4.5
1966 1967 1968	128,058 129,874	75,770 77,347	72,895 74,372	3,979 3,844	68,915 70,527	2,875 2,975	52,288 52,527	59.2 59.6	56.9 57.3	3.8 3.8 3.6
1969	132,028 134,335	78,737 80,734	75,920 77,902	3,817 3,606	72,103 74,296	2,817 2,832	53,291 53,602	59.6 60.1	57.5 58.0	3.5
1970 1971	137,085 140,216	82,771 84,382	78,678 79,367	3,463 3,394	75,215 75,972	4,093 5,016	54,315 55,834	60.4 60.2	57.4 56.6	4.9 5.9
1977 1972 5 1972 5 1973 5 1974	144,126 147,096	87,034 89,429	82,153 85,064	3,484 3,470	78,669 81,594	4,882 4,365	57,091 57,667	60.4 60.8	57.0 57.8	5.6 4.9
1974 1975	150,120 153,153	91,949 93,775	86,794 85,846	3,515 3,408	83,279 82,438	5,156 7,929	58,171 59,377	61.3 61.2	57.8 56.1	5.6
1976	156,150 159,033	96,158 99,009	88,752 92,017	3,331 3,283	85,421 88,734	7,406 6,991	59,991 60,025	61.6 62.3	56.8 57.9	8.5 7.7 7.1
1977 1978 <sup>5</sup> 1979	161,910 164,863	102,251 104,962	96,048 98,824	3,387 3,347	92,661 95,477	6,202 6,137	59,659 59,900	63.2 63.7	59.3 59.9	6.1 5.8
1980	167.745	106 940	99.303	3,364	95,938	7 637	60.806	63.8	59.2	7.1
1981 1982	170,130 172,271	108,670 110,204	100,397 99,526	3,368 3,401	97,030 96,125	8,273 10,678	61,460 62,067	63.9 64.0	59.0 57.8	7.6 9.7
1983 1984	174,215 176,383	111,550 113,544	100,834 105,005	3,383 3,321	97,450 101,685	10,717 8,539	62,665 62,839	64.0 64.4	57.9 59.5	9.6 7.5
1985 1986 <sup>5</sup> 1987	178,206 180,587	115,461 117,834	107,150 109.597	3,179 3,163	103,971	8,312 8,237	62,744 62,752	64.8 65.3	60.1 60.7	7.2 7.0
1987 1988	182,753 184,613	119,865 121,669	112,440	3,208 3,169	106,434 109,232 111,800	7,425 6,701	62,888 62,944	65.6 65.9	61.5 62.3	6.2
1989	186,393	123,869	114,968 117,342	3,199	114,142	6,528	62,523	66.5	63.0	5.5 5.3
1990 <sup>5</sup>	189,164 190,925	125,840 126,346	118,793 117,718	3,223 3,269	115,570 114,449	7,047 8,628	63,324 64,578 64,700	66.5 66.2	62.8 61.7	5.6 6.8
1992 1993 1994 <sup>5</sup>	192,805 194,838 196,814	128,105 129,200 131,056	117,718 118,492 120,259 123,060	3,247 3,115 3,409	115,245 117,144 119,651	9,613 8,940 7,996	64,700 65,638 65,758	66.4 66.3 66.6	61.5 61.7 62.5	6.8 7.5 6.9 6.1
1995	198,584	132.304	124,900 126,708	3.440	121,460	7.404	66,280 66,647	66.6	62.9 63.2	5.6
1996 1997 <sup>5</sup> 1998 <sup>5</sup>	200,591 203,133	133,943 136,297	129,558	3,443 3,399 3,378	123,264 126,159	7,236 6,739 6,210	66,837 67,547	66.8 67.1 67.1	63.2 63.8 64.1	5.4 4.9 4.5
1999	205,220 207,753	137,673 139,368	131,463 133,488	3,378	128,085 130,207	5,880	68,385	67.1	64.3	4.5

See next page for continuation of table.

<sup>1</sup> Not seasonally adjusted.
2 Civilian labor force as percent of civilian noninstitutional population.
3 Civilian employment as percent of civilian noninstitutional population.
4 Unemployed as percent of civilian labor force.

TABLE B-35. Civilian population and labor force, 1929-2009—Continued

[Monthly data seasonally adjusted, except as noted]

				vilian labor for	ce	except do ne	touj			
	Civilian noninsti-			Employment			Not in	Civilian labor force	Civilian employ-	Unemploy- ment
Year or month	tutional population <sup>1</sup>	Total	Total	Agricultural	Non- agricultural	Un- employ- ment	labor force	participa- tion rate <sup>2</sup>	ment/ population ratio <sup>3</sup>	rate, civilian workers <sup>4</sup>
		The	ousands of pe	rsons 16 years	of age and ov	er			Percent	
2000 5, 6 2001	212,577 215,092 217,570 221,168 223,357	142,583 143,734 144,863 146,510 147,401	136,891 136,933 136,485 137,736 139,252	2,464 2,299 2,311 2,275 2,232	134,427 134,635 134,174 135,461 137,020	5,692 6,801 8,378 8,774 8,149	69,994 71,359 72,707 74,658 75,956	67.1 66.8 66.6 66.2 66.0	64.4 63.7 62.7 62.3 62.3	4.0 4.7 5.8 6.0 5.5
2005 5 2006 5 2007 5 2008 5 2009 5	226,082 228,815 231,867 233,788 235,801	149,320 151,428 153,124 154,287 154,142	141,730 144,427 146,047 145,362 139,877	2,197 2,206 2,095 2,168 2,103	139,532 142,221 143,952 143,194 137,775	7,591 7,001 7,078 8,924 14,265	76,762 77,387 78,743 79,501 81,659	66.0 66.2 66.0 66.0 65.4	62.7 63.1 63.0 62.2 59.3	5.1 4.6 4.6 5.8 9.3
2006: Jan <sup>5</sup>	227,553 227,763 227,975 228,199 228,428 228,671 229,167 229,420 229,675 229,905 230,108	150,201 150,629 150,839 150,915 151,085 151,368 151,729 151,650 152,020 152,360 152,698	143,142 143,444 143,765 143,794 144,108 144,370 144,229 144,631 144,797 145,292 145,477 145,914	2,163 2,180 2,157 2,253 2,198 2,258 2,280 2,237 2,176 2,179 2,159 2,226	140,932 141,251 141,573 141,461 141,889 142,065 142,083 142,442 142,640 143,188 143,280 143,661	7,059 7,185 7,075 7,122 6,977 6,998 7,154 7,097 6,853 6,728 6,883 6,784	77,352 77,135 77,136 77,284 77,343 77,529 77,439 77,770 77,655 77,545 77,410	66.0 66.1 66.2 66.1 66.1 66.2 66.1 66.2 66.3 66.3 66.4	62.9 63.0 63.1 63.0 63.1 63.0 63.1 63.3 63.3 63.3	4.7 4.8 4.7 4.6 4.6 4.7 4.7 4.5 4.4 4.5 4.4
2007: Jan <sup>5</sup>	230,650 230,834 231,034 231,253 231,480 231,713 231,958 232,211 232,461 232,715 232,939 233,156	153,117 152,941 153,093 152,531 152,717 153,045 153,039 152,781 153,393 153,158 153,767 153,869	146,032 146,043 146,368 145,686 145,952 146,079 145,926 145,685 146,193 145,885 146,483 146,173	2,214 2,302 2,188 2,077 2,088 1,951 2,017 1,861 2,077 2,113 2,138 2,207	143,757 143,738 144,155 143,545 143,843 144,137 144,033 143,856 144,117 143,846 144,347 143,926	7,085 6,898 6,725 6,845 6,765 6,966 7,113 7,096 7,203 7,273 7,284 7,696	77,533 77,893 77,940 78,761 78,763 78,668 78,919 79,067 79,557 79,172 79,286	66.4 66.3 66.3 66.0 66.0 66.0 65.8 66.0 65.8 66.0 66.0	63.3 63.4 63.0 63.1 63.0 62.9 62.7 62.9 62.7 62.9 62.7	4.6 4.5 4.4 4.5 4.4 4.6 4.6 4.7 4.7 4.7 5.0
2008: Jan <sup>5</sup>	232,616 232,809 232,995 233,198 233,405 233,627 233,864 234,107 234,360 234,612 234,828 235,035	154,048 153,600 153,936 154,420 154,420 154,410 154,696 154,590 154,454 154,524	146,421 146,165 146,173 146,306 146,023 145,768 145,515 145,187 145,021 144,677 143,907	2,205 2,202 2,190 2,122 2,125 2,126 2,141 2,148 2,207 2,192 2,195 2,185	144,146 143,965 143,976 144,129 143,888 143,639 143,422 143,045 142,793 142,576 141,742	7,628 7,435 7,793 7,631 8,397 8,560 8,895 9,509 9,569 10,172 10,617 11,400	78,568 79,209 79,029 79,262 78,985 79,300 79,454 79,411 79,770 79,764 80,304 80,448	66.2 66.0 66.1 66.0 66.2 66.1 66.0 66.0 65.8 65.8	62.9 62.8 62.7 62.7 62.6 62.4 62.2 62.0 61.9 61.3 60.9	5.0 4.8 5.1 5.0 5.4 5.5 5.8 6.1 6.2 6.6 6.9 7.4
2009: Jan <sup>5</sup>	234,739 234,913 235,086 235,271 235,452 235,655 235,870 236,322 236,550 236,743 236,924	154,140 154,401 154,7164 154,718 154,956 154,759 154,351 154,426 153,927 153,854 153,720 153,059	142,221 141,687 140,854 140,902 140,438 140,038 139,817 139,433 138,768 138,242 138,381 137,792	2,147 2,148 2,051 2,143 2,166 2,154 2,138 2,095 2,009 2,041 2,086 2,056	140,014 139,559 138,830 138,762 138,287 137,825 137,629 137,285 136,752 136,311 136,357 135,717	11,919 12,714 13,310 13,816 14,518 14,721 14,534 14,993 15,159 15,612 15,340 15,267	80,599 80,512 80,922 80,554 80,496 80,895 81,519 81,661 82,396 82,696 83,022 83,865	65.7 65.6 65.8 65.8 65.7 65.4 65.1 65.0 64.9 64.9	60.6 60.3 59.9 59.9 59.6 59.4 59.3 59.1 58.7 58.4 58.5	7.7 8.2 8.6 8.9 9.4 9.5 9.4 9.7 9.8 10.1 10.0

Note: Labor force data in Tables B-35 through B-44 are based on household interviews and relate to the calendar week including the 12th of the month. For definitions of terms, area samples used, historical comparability of the data, comparability with other series, etc., see *Employment and Earnings* or population control adjustments to the CPS at http://www.bls.gov/cps/documentation.htm#concepts.

<sup>&</sup>lt;sup>5</sup> Not strictly comparable with earlier data due to population adjustments or other changes. See Employment and Earnings or population control adjustments to the Current Population Survey (CPS) at http://www.bls.gov/cps/documentation.htm#concepts for details on breaks in series.
<sup>6</sup> Beginning in 2000, data for agricultural employment are for agricultural and related industries; data for this series and for nonagricultural employment are not strictly comparable with data for earlier years. Because of independent seasonal adjustment for these two series, monthly data will not add to total civilian employment.

TABLE B-36. Civilian employment and unemployment by sex and age, 1962-2009

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

		[11100		an employ		ago un	u ovor, m	onany da		nany adju Un	nemployme	ent		
			Males			Females				Males			Females	
Year or month	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
1962 1963 1964 1965 1966 1966 1967 1968 1970 1971 1972 1973 1974 1975 1976 1977 1978 1980 1981 1982 1983 1984 1988 1988 1989 1999 1999 1999 1999	66.702 67,762 69,305 71,088 72,895 74,372 75,920 78,678 79,367 85,064 86,794 88,752 99,303 100,397 99,526 100,834 105,050 109,597 112,496 114,968 117,342 118,793 114,968 117,342 118,793 114,968 117,342 118,793 114,900 124,900 124,900 124,900 124,901 136,833 136,833 131,463 131,463 131,463 131,463 131,463 131,463 131,464 146,027 146,017 146,	44,177 44,657 46,340 46,919 48,114 48,188 48,930 52,349 55,302 55,349 56,479 57,607 57,397 59,081 56,479 56,271 59,081 56,479 56,271 66,171 66,171 67,397 67,397 77,496 67,377 73,315 66,422 66,450 67,377 73,315 66,450 73,315 67,317 74,524 75,903 77,315 77	2,362 2,406 2,587 2,918 3,253 3,186 3,253 3,478 3,478 3,478 4,1039 4,103 3,947 4,1336 4,300 4,300 3,312 3,321 3,321 3,321 3,323 3,321 3,321 3,477 2,917 2,917 2,736 2,782 2,783 2,78	42,816 42,2816 43,422 43,688 43,422 43,688 44,581 44,894 44,893 45,581 48,310 48,310 48,310 53,308 55,283 55,789 56,780 66,284 66,085 66,761 68,784 67,761 69,634 69,776 67,135 67,761 69,634 69,734 70,415 67,753 77,75,337 77,75,337 77,75,477 75,477 75,477 75,504 77,5000 77,4964 77,968	22,525 23,105 24,748 25,976 8,93 27,807 29,084 29,984 29,976 33,715 33,789 35,615 33,989 35,615 33,989 37,15 33,989 37,15 33,989 37,15 33,989 37,15 33,989 37,15 33,989 37,15 33,989 37,15 33,989 37,15 33,989 37,15 33,989 44,217 42,100 43,25 48,706 53,496 53,496 53,496 54,910 57,523 58,501 59,873 60,771 53,686 63,757 66,925 67,792 67,792 67,792 68,208 68,162 68,208 68,162 68,208	1,833 1,849 2,118 2,498 2,118 2,498 2,156 2,730 2,730 3,231 3,345 3,784 3,785 3,105	over 20,693 21,250 22,3510 23,510 23,510 23,510 23,510 23,510 23,510 25,281 25,	3,911 4,070 3,786 6,2875 2,875 2,875 2,875 2,875 2,872 4,093 5,016 4,365 5,156 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,137 7,406 6,202 6,203	2,423 2,472 1,914 1,551 1,519 1,419 2,238 2,789 2,275 2,714 4,036 6,789 2,275 3,142 4,036 6,789 4,744 4,451 4,517 6,179 3,142 4,517 3,120 4,744 4,517 3,120 4,101 4,517 3,120 4,101	408 501 487 479 432 448 426 440 599 693 711 653 7517 966 939 874 813 811 913 812 806 779 732 667 751 806 768 806 779 732 667 751 806 663 779 732 667 751 806 663 740 740 664 667 662 663 736 664 667 667 667 667 668 898 898 749 667 667 667 667 667 667 667 66	0ver   2,016   1,971   1,1718   1,1718   1,1718   1,1718   1,1000	1,488 8,1,598 1,1,452 1,1,252 1,1,224 1,1,252 1,1,224 1,1,252 1,277 2,20,20 3,369 6,3,369 6,4,499 3,369 6,4,497 3,379 4,457 3,794 4,57 7,3,794 3,306 1,3,006 3,006 3,0	313 383 385 395 405 391 412 413 506 568 598 598 780 780 7755 800 880 789 743 755 800 880 687 667 667 667 558 621 597 598 697 598 697 598 697 598 697 598 697 598 697 598 697 598 697 598 697 598 697 598 698 598 697 598 698 697 598 698 697 598 698 698 698 699 699 699 699 6	1,175 1,216 1,195 1,056 1,075 1,075 1,077 2,684 1,658 1,652 1,658 1,652 1,658
Sept	145,021 144,677 143,907 143,188 142,221 141,687 140,854 140,902 140,438 140,038 139,817 139,433	77,205 76,902 76,407 75,812 75,118 74,756 74,072 74,107 73,974 73,727 73,613 73,436	2,725 2,661 2,557 2,575 2,492 2,490 2,405 2,442 2,423 2,373 2,357 2,294	74,480 74,241 73,850 73,237 72,625 72,266 71,667 71,665 71,552 71,354 71,255 71,142	67,816 67,775 67,500 67,376 67,103 66,931 66,782 66,794 66,463 66,311 66,205 65,997	2,801 2,772 2,694 2,632 2,613 2,693 2,673 2,647 2,617 2,570 2,519 2,446	65,015 65,003 64,806 64,744 64,391 64,238 64,110 64,147 63,847 63,741 63,685 63,552	9,569 10,172 10,617 11,400 11,919 12,714 13,310 13,816 14,518 14,721 14,534 14,993	5,603 5,918 6,153 6,650 6,948 7,425 7,852 8,295 8,689 8,749 8,642 9,031	739 851 800 778 805 831 840 854 902 857 914 976	4,864 5,067 5,353 5,871 6,144 6,593 7,013 7,441 7,787 7,892 7,728 8,055	3,967 4,254 4,464 4,750 4,971 5,290 5,458 5,521 5,829 5,972 5,892 5,962	579 531 538 590 569 614 595 563 616 729 667 667	3,388 3,723 3,926 4,160 4,402 4,676 4,863 4,957 5,213 5,243 5,225 5,295
Sept Oct Nov Dec	138,768 138,242 138,381 137,792	73,120 72,844 72,794 72,499	2,259 2,182 2,131 2,108	70,861 70,662 70,662 70,391	65,648 65,398 65,587 65,293	2,368 2,266 2,318 2,294	63,280 63,133 63,269 62,998	15,159 15,612 15,340 15,267	9,077 9,340 9,171 8,955	961 978 932 944	8,116 8,362 8,239 8,011	6,081 6,271 6,169 6,312	675 717 695 690	5,406 5,554 5,473 5,622

Note: See footnote 5 and Note, Table B-35.

TABLE B-37. Civilian employment by demographic characteristic, 1962-2009

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

		[Inousa	Wh		years or a	ge and ov	Black an	-	asonally a		ack or Afric	an Americ	an 1
V	. All		VVII	ite ·			DIACK AII	u ouer ·		Dic	ack of Affic	an America	
Year or month	civilian workers	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19
1962 1963 1964 1965 1966 1967 1968	66,702 67,762 69,305 71,088 72,895 74,372 75,920 77,902	59,698 60,622 61,922 63,446 65,021 66,361 67,750 69,518	40,016 40,428 41,115 41,844 42,331 42,833 43,411 44,048	19,682 20,194 20,807 21,602 22,690 23,528 24,339 25,470	3,774 3,851 4,076 4,562 5,176 5,114 5,195 5,508	7,003 7,140 7,383 7,643 7,877 8,011 8,169 8,384	4,160 4,229 4,359 4,496 4,588 4,646 4,702 4,770	2,843 2,911 3,024 3,147 3,289 3,365 3,467 3,614	420 404 440 474 545 568 584 609				
1970	78,678 79,367 82,153 85,064 86,794 85,846 88,752 92,017 96,048 98,824	70,217 70,878 73,370 75,708 77,184 76,411 78,853 81,700 84,936 87,259	44,178 44,595 45,944 47,085 47,674 46,697 47,775 49,150 50,544 51,452	26,039 26,283 27,426 28,623 29,511 29,714 31,078 32,550 34,392 35,807	5,571 5,670 6,173 6,623 6,796 6,487 6,724 7,068 7,367 7,356	8,464 8,488 8,783 9,356 9,610 9,435 9,899 10,317 11,112 11,565	4,813 4,796 4,952 5,265 5,352 5,161 5,363 5,579 5,936 6,156	3,650 3,692 3,832 4,092 4,258 4,275 4,536 4,739 5,177 5,409	574 538 573 647 652 615 611 619 703 727	7,802 8,128 8,203 7,894 8,227 8,540 9,102 9,359	4,368 4,527 4,527 4,275 4,404 4,565 4,796 4,923	3,433 3,601 3,677 3,618 3,823 3,975 4,307 4,436	509 570 554 507 508 508 508 571 579
1980	99,303 100,397 99,526 100,834 105,005 107,150 109,597 112,440 114,968 117,342	87,715 88,709 87,903 88,893 92,120 93,736 95,660 97,789 99,812 101,584	51,127 51,315 50,287 50,621 52,462 53,046 53,785 54,647 55,550 56,352	36,587 37,394 37,615 38,272 39,659 40,690 41,876 43,142 44,262 45,232	7,021 6,588 5,984 5,799 5,836 5,768 5,792 5,898 6,030 5,946	11,588 11,624 11,941 12,885 13,414 13,937 14,652 15,156 15,757	6,059 6,083 5,983 6,166 6,629 6,845 7,107 7,459 7,722 7,963	5,529 5,606 5,641 5,775 6,256 6,569 6,830 7,192 7,434 7,795	689 637 565 543 607 666 681 742 774 813	9,313 9,355 9,189 9,375 10,119 10,501 10,814 11,309 11,658 11,953	4,798 4,794 4,637 4,753 5,124 5,270 5,428 5,661 5,824 5,928	4,515 4,561 4,552 4,622 4,995 5,231 5,386 5,648 5,834 6,025	547 505 428 416 474 532 536 587 601 625
1990 1991 1992 1993 1994 1995 1996 1997 1998	118,793 117,718 118,492 120,259 123,060 124,900 126,708 129,558 131,463 133,488	102,261 101,182 101,669 103,045 105,190 106,490 107,808 109,856 110,931 112,235	56,703 55,797 55,959 56,656 57,452 58,146 58,888 59,998 60,604 61,139	45,558 45,385 45,710 46,390 47,738 48,344 48,920 49,859 50,327 51,096	5,779 5,216 4,985 5,113 5,398 5,593 5,667 5,807 6,089 6,204	16,533 16,536 16,823 17,214 17,870 18,409 18,900 19,701 20,532 21,253	8,401 8,426 8,482 8,693 8,998 9,231 9,319 9,687 10,089 10,307	8,131 8,110 8,342 8,521 8,872 9,179 9,580 10,014 10,443 10,945	801 690 684 691 763 826 832 853 962 968	12,175 12,074 12,151 12,382 12,835 13,279 13,542 13,969 14,556 15,056	5,995 5,961 5,930 6,047 6,241 6,422 6,456 6,607 6,871 7,027	6,180 6,113 6,221 6,334 6,595 6,857 7,086 7,362 7,685 8,029	598 494 492 494 552 586 613 631 736 691
2000 2001 2002 2003 2004 2005 2006 2007 2008 2008	136,891 136,933 136,485 137,736 139,252 141,730 144,427 146,047 145,362 139,877	114,424 114,430 114,013 114,235 115,239 116,949 118,833 119,792 119,126 114,996	62,289 62,212 61,849 61,866 62,712 63,763 64,883 65,289 64,624 61,630	52,136 52,218 52,164 52,369 52,527 53,186 53,950 54,503 54,501 53,366	6,160 5,817 5,441 5,064 5,039 5,105 5,215 4,990 4,697 4,138					15,156 15,006 14,872 14,739 14,909 15,313 15,765 16,051 15,953 15,025	7,082 6,938 6,959 6,820 6,912 7,155 7,354 7,500 7,398 6,817	8,073 8,068 7,914 7,919 7,997 8,158 8,410 8,551 8,554 8,208	711 637 611 516 520 536 618 566 541
2008: Jan	146,421 146,165 146,173 146,306 146,023 145,768 145,515 145,187 145,021 144,677 143,907 143,188	119,926 119,665 119,695 119,676 119,624 119,441 119,382 119,016 119,031 118,697 118,018 117,335	65,220 65,161 65,135 65,040 65,029 64,837 64,885 64,580 64,368 64,153 63,789 63,284	54,706 54,504 54,559 54,636 54,595 54,604 54,436 54,436 54,663 54,543 54,229 54,050	4,797 4,788 4,839 4,961 4,910 4,729 4,623 4,642 4,607 4,609 4,487 4,421					16,079 16,165 16,127 16,218 16,030 16,026 15,950 16,024 15,742 15,742 15,676 15,646	7,554 7,560 7,477 7,533 7,448 7,462 7,377 7,495 7,329 7,286 7,150 7,126	8,524 8,604 8,650 8,685 8,582 8,563 8,573 8,529 8,413 8,501 8,526 8,520	573 572 527 573 558 527 533 594 564 535 473 483
2009: Jan	142,221 141,687 140,854 140,902 140,438 140,038 139,817 139,433 138,768 138,242 138,381 137,792	116,709 116,427 115,663 115,896 115,451 115,102 114,984 114,784 114,215 113,754 113,669 113,339	62,836 62,487 61,908 62,019 61,895 61,665 61,648 61,510 61,237 60,953 60,833 60,598	53,873 53,939 53,755 53,877 53,557 53,437 53,336 53,274 52,979 52,801 52,836 52,741	4,409 4,494 4,346 4,300 4,315 4,205 4,140 4,060 3,980 3,816 3,820 3,804					15,463 15,296 15,176 15,119 15,066 15,048 15,050 14,914 14,754 14,763 14,904 14,758	7,014 6,940 6,865 6,839 6,822 6,792 6,832 6,745 6,694 6,748 6,755 6,765	8,449 8,356 8,311 8,281 8,244 8,255 8,219 8,169 8,060 8,015 8,148 7,992	496 455 461 496 442 448 476 460 401 409 373 379

<sup>&</sup>lt;sup>1</sup> Beginning in 2003, persons who selected this race group only. Prior to 2003, persons who selected more than one race were included in the group they identified as the main race. Data for "black or African American" were for "black" prior to 2003. Data discontinued for "black and other" series. See Employment and Earnings or concepts and methodology of the Current Population Survey (CPS) at http://www.bls.gov/cps/documentation.htm#concepts for details.

Note: Beginning with data for 2000, detail will not sum to total because data for all race groups are not shown here. See footnote 5 and Note, Table B–35.

TABLE B-38. Unemployment by demographic characteristic, 1962-2009

[Thousands of persons 16 years of age and over; monthly data seasonally adjusted]

		(		ite <sup>1</sup>	,	9	Black an	·	asunany a		ack or Afric	an America	an <sup>1</sup>
Year or month	All civilian workers	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19	Total	Males	Females	Both sexes 16–19
1962 1963 1964 1965 1966 1967 1968 1969	3,911 4,070 3,786 3,366 2,875 2,975 2,817 2,832	3,052 3,208 2,999 2,691 2,255 2,338 2,226 2,260	1,915 1,976 1,779 1,556 1,241 1,208 1,142 1,137	1,137 1,232 1,220 1,135 1,014 1,130 1,084 1,123	580 708 708 705 651 635 644 660	861 863 787 678 622 638 590 571	509 496 426 360 310 300 277 267	352 367 361 318 312 338 313 304	142 176 165 171 186 203 194 193				
1970 1971 1972 1973 1974 1975 1976 1977 1978	4,093 5,016 4,882 4,365 5,156 7,929 7,406 6,991 6,202 6,137	3,339 4,085 3,906 3,442 4,097 6,421 5,914 5,441 4,698 4,664	1,857 2,309 2,173 1,836 2,169 3,627 3,258 2,883 2,411 2,405	1,482 1,777 1,733 1,606 1,927 2,794 2,656 2,558 2,287 2,260	871 1,011 1,021 955 1,104 1,413 1,364 1,284 1,189 1,193	754 930 977 924 1,058 1,507 1,492 1,550 1,505 1,473	380 481 486 440 544 815 779 784 731	374 450 491 484 514 692 713 766 774 759	235 249 288 280 318 355 355 379 394 362	906 846 965 1,369 1,334 1,393 1,330 1,319	448 395 494 741 698 698 641 636	458 451 470 629 637 695 690 683	279 262 297 330 330 354 360 333
1980 1981 1982 1983 1984 1985 1986 1987 1987 1988	7,637 8,273 10,678 10,717 8,539 8,312 8,237 7,425 6,701 6,528	5,884 6,343 8,241 8,128 6,372 6,191 6,140 5,501 4,944 4,770	3,345 3,580 4,846 4,859 3,600 3,426 3,433 3,132 2,766 2,636	2,540 2,762 3,395 3,270 2,772 2,765 2,708 2,369 2,177 2,135	1,291 1,374 1,534 1,387 1,116 1,074 1,070 995 910 863	1,752 1,930 2,437 2,588 2,167 2,121 2,097 1,924 1,757 1,757	922 997 1,334 1,401 1,144 1,095 1,097 969 888 889	830 933 1,104 1,187 1,022 1,026 999 955 869 868	377 388 443 441 384 394 383 353 316 331	1,553 1,731 2,142 2,272 1,914 1,864 1,840 1,684 1,547	815 891 1,167 1,213 1,003 951 946 826 771 773	738 840 975 1,059 911 913 894 858 776 772	343 357 396 392 353 357 347 312 288 300
1990 1991 1992 1993 1994 1995 1996 1997 1998	7,047 8,628 9,613 8,940 7,996 7,404 7,236 6,739 6,210 5,880	5,186 6,560 7,169 6,655 5,892 5,459 5,300 4,836 4,484 4,273	2,935 3,859 4,209 3,828 3,275 2,999 2,896 2,641 2,431 2,274	2,251 2,701 2,959 2,827 2,617 2,460 2,404 2,195 2,053 1,999	903 1,029 1,037 992 960 952 939 912 876 844	1,860 2,068 2,444 2,285 2,104 1,945 1,936 1,903 1,726 1,606	971 1,087 1,314 1,227 1,092 984 984 935 835 792	889 981 1,130 1,058 1,011 961 952 967 891 814	308 330 390 373 360 394 367 359 329 318	1,565 1,723 2,011 1,844 1,666 1,538 1,592 1,560 1,426 1,309	806 890 1,067 971 848 762 808 747 671 626	758 833 944 872 818 777 784 813 756 684	268 280 324 313 300 325 310 302 281 268
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	5,692 6,801 8,378 8,774 8,149 7,591 7,001 7,078 8,924 14,265	4,121 4,969 6,137 6,311 5,847 5,350 5,002 5,143 6,509 10,648	2,177 2,754 3,459 3,643 3,282 2,931 2,730 2,869 3,727 6,421	1,944 2,215 2,678 2,668 2,565 2,419 2,271 2,274 2,782 4,227	795 845 925 909 890 845 794 805 947 1,157					1,241 1,416 1,693 1,787 1,729 1,700 1,549 1,445 1,788 2,606	620 709 835 891 860 844 774 752 949 1,448	621 706 858 895 868 856 775 693 839 1,159	230 260 260 255 241 267 253 235 246 288
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	7,628 7,435 7,793 7,631 8,397 8,560 8,895 9,509 9,569 10,172 10,617 11,400	5,536 5,461 5,585 5,543 6,071 6,222 6,525 6,882 6,868 7,523 7,875 8,458	3,124 3,058 3,097 3,143 3,418 3,514 3,801 3,878 4,119 4,420 4,637 4,901	2,412 2,403 2,488 2,400 2,652 2,708 2,724 3,004 2,749 3,103 3,238 3,557	907 803 733 827 992 969 1,085 955 974 1,017 1,018 1,033					1,620 1,462 1,619 1,534 1,698 1,660 1,758 1,934 2,027 2,017 2,031 2,150	845 749 810 762 867 897 979 974 1,094 1,115 1,122	775 713 809 772 831 763 779 960 933 902 910 924	296 253 249 190 262 223 261 254 242 267 220 241
2009: Jan	11,919 12,714 13,310 13,816 14,518 14,721 14,534 14,993 15,159 15,612 15,340 15,267	8,815 9,408 9,996 10,213 10,874 10,986 10,927 11,254 11,366 11,813 11,589 11,266	5,177 5,575 5,932 6,196 6,625 6,712 6,677 6,985 7,213 7,037 6,707	3,638 3,834 4,064 4,017 4,250 4,274 4,251 4,347 4,381 4,600 4,552 4,559	1,006 1,077 1,107 1,075 1,127 1,163 1,202 1,303 1,212 1,279 1,142 1,174					2,278 2,396 2,367 2,676 2,650 2,617 2,600 2,682 2,701 2,754 2,757 2,843	1,307 1,365 1,362 1,538 1,490 1,444 1,397 1,499 1,468 1,496 1,559 1,505	971 1,031 1,005 1,138 1,161 1,173 1,203 1,184 1,233 1,257 1,198 1,337	288 289 228 268 294 280 270 247 287 298 370 356

<sup>&</sup>lt;sup>1</sup> See footnote 1 and Note, Table B-37.

Note: See footnote 5 and Note, Table B-35.

TABLE B-39. Civilian labor force participation rate and employment/population ratio, 1962-2009

			Labor ford			,		Iny dujus	,	Employme	nt/popula	ition ratio		
Year or month	All civilian workers	Males	Females	Both sexes 16–19 years	White <sup>2</sup>	Black and other <sup>2</sup>	Black or African Ameri- can <sup>2</sup>	All civilian workers	Males	Females	Both sexes 16–19 years	White <sup>2</sup>	Black and other <sup>2</sup>	Black or African Ameri- can <sup>2</sup>
1962 1963 1964 1965 1966 1967 1968	58.8 58.7 58.7 58.9 59.2 59.6 59.6 60.1	82.0 81.4 81.0 80.7 80.4 80.4 80.1 79.8	37.9 38.3 38.7 39.3 40.3 41.1 41.6 42.7	46.1 45.2 44.5 45.7 48.2 48.4 48.3 49.4	58.3 58.2 58.2 58.4 58.7 59.2 59.3 59.9	63.2 63.0 63.1 62.9 63.0 62.8 62.2 62.1		55.5 55.4 55.7 56.2 56.9 57.3 57.5 58.0	77.7 77.1 77.3 77.5 77.9 78.0 77.8 77.6	35.6 35.8 36.3 37.1 38.3 39.0 39.6 40.7	39.4 37.4 37.3 38.9 42.1 42.2 42.2 43.4	55.4 55.3 55.5 56.0 56.8 57.2 57.4 58.0	56.3 56.2 57.0 57.8 58.4 58.2 58.0 58.1	
1970	60.4 60.2 60.4 60.8 61.3 61.2 61.6 62.3 63.2 63.7	79.7 79.1 78.9 78.8 78.7 77.9 77.5 77.7 77.9	43.3 43.4 43.9 44.7 45.7 46.3 47.3 48.4 50.0 50.9	49.9 49.7 51.9 53.7 54.8 54.0 54.5 56.0 57.8 57.9	60.2 60.1 60.4 60.8 61.4 61.5 61.8 62.5 63.3 63.9	61.8 60.9 60.2 60.5 60.3 59.6 59.8 60.4 62.2 62.2	59.9 60.2 59.8 58.8 59.0 59.8 61.5 61.4	57.4 56.6 57.0 57.8 57.8 56.1 56.8 57.9 59.3	76.2 74.9 75.0 75.5 74.9 71.7 72.0 72.8 73.8 73.8	40.8 40.4 41.0 42.0 42.6 42.0 43.2 44.5 46.4 47.5	42.3 41.3 43.5 45.9 46.0 43.3 44.2 46.1 48.3 48.5	57.5 56.8 57.4 58.2 58.3 56.7 57.5 58.6 60.0 60.6	56.8 54.9 54.1 55.0 54.3 51.4 52.0 52.5 54.7 55.2	53.7 54.5 53.5 50.1 50.8 51.4 53.6 53.8
1980 1981 1982 1983 1983 1985 1986 1987 1987	63.8 63.9 64.0 64.4 64.8 65.3 65.6 65.9 66.5	77.4 77.0 76.6 76.4 76.3 76.3 76.2 76.2 76.2	51.5 52.1 52.6 52.9 53.6 54.5 55.3 56.0 56.6 57.4	56.7 55.4 54.1 53.5 53.9 54.5 54.7 54.7 55.3 55.9	64.1 64.3 64.3 64.3 64.6 65.0 65.5 65.8 66.2 66.7	61.7 61.3 61.6 62.1 62.6 63.3 63.7 64.3 64.0 64.7	61.0 60.8 61.0 61.5 62.2 62.9 63.3 63.8 63.8 64.2	59.2 59.0 57.8 57.9 59.5 60.1 60.7 61.5 62.3 63.0	72.0 71.3 69.0 68.8 70.7 70.9 71.0 71.5 72.0 72.5	47.7 48.0 47.7 48.0 49.5 50.4 51.4 52.5 53.4 54.3	46.6 44.6 41.5 41.5 43.7 44.4 44.6 45.5 46.8 47.5	60.0 60.0 58.8 58.9 60.5 61.0 61.5 62.3 63.1 63.8	53.6 52.6 50.9 51.0 53.6 54.7 55.4 56.8 57.4 58.2	52.3 51.3 49.4 49.5 52.3 53.4 54.1 55.6 56.3 56.9
1990 1991 1992 1993 1994 1995 1996 1997 1998	66.5 66.2 66.4 66.3 66.6 66.6 66.8 67.1 67.1	76.4 75.8 75.8 75.4 75.1 75.0 74.9 75.0 74.9	57.5 57.4 57.8 57.9 58.8 58.9 59.3 59.8 59.8 60.0	53.7 51.6 51.3 51.5 52.7 53.5 52.3 51.6 52.8 52.0	66.9 66.6 66.8 66.8 67.1 67.1 67.2 67.5 67.3	64.4 63.8 64.6 63.8 63.9 64.3 64.6 65.2 66.0 65.9	64.0 63.3 63.9 63.2 63.4 63.7 64.1 65.6 65.8	62.8 61.7 61.5 61.7 62.5 62.9 63.2 63.8 64.1 64.3	72.0 70.4 69.8 70.0 70.4 70.8 70.9 71.3 71.6	54.3 53.7 53.8 54.1 55.3 55.6 56.0 56.8 57.1	45.3 42.0 41.0 41.7 43.4 44.2 43.5 43.4 45.1 44.7	63.7 62.6 62.4 62.7 63.5 63.8 64.1 64.6 64.7 64.8	57.9 56.7 56.4 56.3 57.2 58.1 58.6 59.4 60.9 61.3	56.7 55.4 54.9 55.0 56.1 57.1 57.4 58.2 59.7 60.6
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	67.1 66.8 66.6 66.2 66.0 66.2 66.0 66.0 65.4	74.8 74.4 74.1 73.5 73.3 73.3 73.5 73.2 73.0 72.0	59.9 59.8 59.6 59.5 59.2 59.3 59.4 59.3 59.5 59.5	52.0 49.6 47.4 44.5 43.9 43.7 43.7 41.3 40.2 37.5	67.3 67.0 66.8 66.5 66.3 66.3 66.5 66.4 66.3 65.8		65.8 65.3 64.8 64.3 63.8 64.2 64.1 63.7 63.7 62.4	64.4 63.7 62.7 62.3 62.3 62.7 63.1 63.0 62.2 59.3	71.9 70.9 69.7 68.9 69.2 69.6 70.1 69.8 68.5 64.5	57.5 57.0 56.3 56.1 56.0 56.2 56.6 56.6 56.2 54.4	45.2 42.3 39.6 36.8 36.4 36.5 36.9 34.8 32.6 28.4	64.9 64.2 63.4 63.0 63.1 63.4 63.8 63.6 62.8 60.2		60.9 59.7 58.1 57.4 57.2 57.7 58.4 58.4 57.3 53.2
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	66.2 66.0 66.1 66.0 66.2 66.1 66.0 66.0 65.8	73.3 73.1 73.1 73.0 73.1 73.0 73.2 73.0 72.9 72.6 72.5	59.6 59.3 59.5 59.5 59.6 59.5 59.3 59.4 59.5 59.4 59.5	41.2 40.0 40.1 41.0 42.1 40.4 40.5 39.9 40.0 39.8 38.5 38.4	66.5 66.2 66.3 66.4 66.4 66.4 66.3 66.4 66.2 66.1		64.0 63.7 64.0 64.0 63.8 63.6 63.6 63.6 63.6 63.2 63.4	62.9 62.8 62.7 62.7 62.6 62.4 62.2 62.0 61.9 61.3 60.9	69.6 69.5 69.3 69.2 69.0 68.8 68.6 68.4 68.1 67.7 67.2 66.6	56.7 56.5 56.6 56.6 56.5 56.4 56.2 56.1 56.0 55.7 55.6	33.9 33.4 33.7 34.6 34.1 32.7 32.1 32.4 32.3 31.8 30.7 30.4	63.5 63.3 63.3 63.2 63.1 63.0 62.7 62.7 62.4 62.0 61.6		58.2 58.4 58.2 58.5 57.7 57.6 57.3 57.4 56.3 56.4 55.9 55.8
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	65.7 65.6 65.8 65.8 65.7 65.4 65.4 65.1 65.0 64.9	72.3 72.3 72.0 72.4 72.5 72.3 72.0 72.2 71.8 71.8 71.5 71.0	59.5 59.6 59.5 59.6 59.5 59.4 59.2 59.1 58.8 58.7 58.8 58.6	38.5 38.8 38.1 38.1 38.4 38.3 37.9 37.5 36.8 36.1 35.8 35.6	66.0 66.1 66.0 66.2 66.3 66.1 65.9 66.0 65.7 65.6 65.4		63.2 63.0 62.4 63.2 62.9 62.6 62.5 62.2 61.6 61.7 62.2 61.9	60.6 60.3 59.9 59.9 59.6 59.4 59.3 59.1 58.7 58.4 58.5	66.1 65.8 65.1 65.1 64.9 64.6 64.5 64.3 63.9 63.6 63.5	55.4 55.2 55.0 55.0 54.7 54.5 54.4 54.2 53.8 53.6 53.7 53.4	30.4 30.3 29.7 29.8 29.5 29.0 28.6 27.8 27.2 26.1 26.2 25.9	61.4 61.2 60.7 60.8 60.6 60.3 60.2 60.1 59.7 59.4 59.4		55.1 54.5 54.0 53.7 53.5 53.3 52.7 52.1 52.0 52.5 51.9

 $<sup>^1</sup>$  Civilian labor force or civilian employment as percent of civilian noninstitutional population in group specified.  $^2$  See footnote 1, Table B-37.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–35.

Table B-40. Civilian labor force participation rate by demographic characteristic, 1968-2009

-				•	White 2			,		Black an	d other o	r black or A	frican A	merican	2
V	All civilian			Males			Female	3			Males			Female	S
Year or month	work- ers	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	Total	Total	16-19 years	20 years and over	Total	16–19 years	20 years and over
											Bla	ick and oth	er <sup>2</sup>		
1968 1969	59.6 60.1	59.3 59.9	80.4 80.2	55.9 56.8	83.2 83.0	40.7 41.8	43.0 44.6	40.4 41.5	62.2 62.1	77.7 76.9	49.7 49.6	82.2 81.4	49.3 49.8	34.8 34.6	51.4 52.0
1970 1971 1972	60.4 60.2 60.4	60.2 60.1 60.4	80.0 79.6 79.6	57.5 57.9 60.1	82.8 82.3 82.0	42.6 42.6 43.2	45.6 45.4 48.1	42.2 42.3 42.7	61.8 60.9 60.2	76.5 74.9 73.9	47.4 44.7 46.0	81.4 80.0 78.6	49.5 49.2 48.8	34.1 31.2 32.3	51.8 51.8 51.2
											Black or	African An	nerican <sup>2</sup>		
1972 1973 1974 1975 1976 1977 1978 1979 1980 1980	60.4 60.8 61.3 61.2 61.6 62.3 63.2 63.7 63.8 63.9 64.0	60.4 60.8 61.4 61.5 61.8 62.5 63.3 63.9 64.1 64.3	79.6 79.4 79.4 78.7 78.4 78.5 78.6 78.6 78.2 77.9	60.1 62.0 62.9 61.9 62.3 64.0 65.0 64.8 63.7 62.4 60.0	82.0 81.6 81.4 80.7 80.3 80.2 80.1 79.8 79.5	43.2 44.1 45.2 45.9 46.9 48.0 49.4 50.5 51.2 51.9 52.4	48.1 50.1 51.7 51.5 52.8 54.5 56.7 57.4 56.2 55.4 55.0	42.7 43.5 44.4 45.3 46.2 47.3 48.7 49.8 50.6 51.5 52.2	59.9 60.2 59.8 58.8 59.0 59.8 61.5 61.4 61.0 60.8 61.0	73.6 73.4 72.9 70.9 70.0 70.6 71.5 71.3 70.3 70.0 70.1	46.3 45.7 46.7 42.6 41.3 43.2 44.9 43.6 43.6 41.6 39.8	78.5 78.4 77.6 76.0 75.4 75.6 76.2 76.3 75.1 74.5	48.7 49.3 49.0 48.8 49.8 50.8 53.1 53.1 53.1 53.5 53.7	32.2 34.2 33.4 34.2 32.9 37.3 36.8 34.9 34.0 33.5	51.2 51.6 51.4 51.1 52.5 53.6 55.5 55.4 56.0
1984	64.0 64.4 64.8 65.3 65.6 65.9 66.5	64.3 64.6 65.0 65.5 65.8 66.2 66.7	77.1 77.1 77.0 76.9 76.8 76.9 77.1	59.4 59.0 59.7 59.3 59.0 60.0 61.0	78.9 78.7 78.5 78.5 78.4 78.3 78.5	52.7 53.3 54.1 55.0 55.7 56.4 57.2	54.5 55.4 55.2 56.3 56.5 57.2 57.1	52.5 53.1 54.0 54.9 55.6 56.3 57.2	61.5 62.2 62.9 63.3 63.8 63.8 64.2	70.6 70.8 70.8 71.2 71.1 71.0 71.0	39.9 41.7 44.6 43.7 43.6 43.8 44.6	75.2 74.8 74.4 74.8 74.7 74.6 74.4	54.2 55.2 56.5 56.9 58.0 58.0 58.7	33.0 35.0 37.9 39.1 39.6 37.9 40.4	56.2 56.8 57.6 58.6 58.9 60.0 60.1 60.6
1990 1991 1992 1993 1994 1995 1996 1997 1998	66.5 66.2 66.4 66.3 66.6 66.6 66.8 67.1 67.1	66.9 66.8 66.8 67.1 67.1 67.2 67.5 67.3	77.1 76.5 76.5 76.2 75.9 75.7 75.8 75.9 75.6 75.6	59.6 57.3 56.9 56.6 57.7 58.5 57.1 56.1 56.6 56.4	78.5 78.0 78.0 77.7 77.3 77.1 77.3 77.5 77.5 77.2	57.4 57.4 57.7 58.0 58.9 59.0 59.1 59.5 59.4 59.6	55.3 54.1 52.5 53.5 55.1 55.5 54.7 54.1 55.4 54.5	57.6 57.6 58.1 58.3 59.2 59.2 59.4 59.9 59.7 59.9	64.0 63.3 63.9 63.2 63.4 63.7 64.1 64.7 65.6 65.8	71.0 70.4 70.7 69.6 69.1 69.0 68.7 68.3 69.0 68.7	40.7 37.3 40.6 39.5 40.8 40.1 39.5 37.4 40.7 38.6	75.0 74.6 74.3 73.2 72.5 72.5 72.3 72.2 72.5 72.4	58.3 57.5 58.5 57.9 58.7 59.5 60.4 61.7 62.8 63.5	36.8 33.5 35.2 34.6 36.3 39.8 39.9 42.5 38.8	60.6 60.8 60.2 60.9 61.4 62.6 64.0 64.8 66.1
2000 2001 2002 2003 2004 2005 2006 2007 2007 2008	67.1 66.8 66.6 66.2 66.0 66.2 66.0 66.2 66.0 65.4	67.3 67.0 66.8 66.5 66.3 66.5 66.4 66.3 65.8	75.5 75.1 74.8 74.2 74.1 74.1 74.3 74.0 73.7 72.8	56.5 53.7 50.3 47.5 47.4 46.2 46.9 44.3 43.0 40.3	77.1 76.9 76.7 76.3 76.2 76.2 76.4 76.3 76.1 75.3	59.5 59.4 59.3 59.2 58.9 58.9 59.0 59.0 59.2 59.1	54.5 52.4 50.8 47.9 46.7 47.6 46.6 44.6 43.3 40.9	59.9 60.0 59.9 59.7 59.7 59.7 60.1 60.3 60.4	65.8 65.3 64.8 64.3 63.8 64.2 64.1 63.7 63.7 62.4	69.2 68.4 68.4 67.3 66.7 67.0 66.8 66.7 65.0	39.2 37.9 37.3 31.1 30.0 32.6 32.3 29.4 29.1 26.4	72.8 72.1 72.1 71.5 70.9 71.3 71.1 71.2 71.1 69.6	63.1 62.8 61.8 61.9 61.5 61.6 61.7 61.1 61.3 60.3	39.6 37.3 34.7 33.7 32.8 32.2 35.6 31.2 29.7 27.9	65.4 65.2 64.4 64.6 64.2 64.4 64.2 64.0 64.3 63.4
2008: Jan Feb Mar Apr June July Aug Sept Mar May June July Aug Sept Mar May June July Aug Sept Get Mov Dec July Aug June June May June June May June July Aug Sept Oct Nov Dec Dec Dec	66.2 66.0 66.1 66.0 66.1 66.0 65.8 65.8 65.7 65.6 65.8 65.8 65.8 65.8 65.8	66.5 66.2 66.3 66.4 66.4 66.4 66.3 66.1 66.0 66.1 66.0 66.2 66.3 66.3 66.3 66.3 66.3 66.3 66.3	74.0 73.8 73.8 73.7 73.9 73.8 74.1 73.7 73.7 73.7 73.5 73.2 73.1 73.2 73.4 73.2 73.1 72.9 72.7 72.7	42.3 42.2 42.1 43.8 45.8 43.9 42.6 42.5 42.8 42.4 41.7 40.8 40.3 40.9 41.8 40.3 37.5 37.5 37.8	76.5 76.3 76.3 76.0 76.1 76.1 76.1 76.1 75.9 75.5 75.5 75.5 75.5 75.6 75.5 75.6 75.7 75.9 75.0 75.0 74.3	59.2 59.0 59.1 59.2 59.2 59.2 59.3 59.2 59.4 59.5 59.4 59.5 59.4 59.5 59.4 59.5 59.4 59.5 59.8 59.8 59.8 59.8 59.8 59.8 59.8	45.2 43.5 43.2 44.8 44.4 43.2 42.9 42.8 43.1 41.5 41.6 42.6 42.0 41.1 40.5 39.5 38.7 38.9 39.0	60.2 60.1 60.2 60.3 60.4 60.5 60.4 60.5 60.4 60.6 60.6 60.6 60.6 60.4 60.3 60.4 60.1 60.4 60.1 60.4	64.0 63.7 64.0 63.8 63.6 63.6 63.6 63.2 63.2 63.2 62.4 63.2 62.2 62.6 62.2 61.6 61.7 62.2 61.9	67.7 66.8 66.6 66.5 66.6 66.7 67.0 65.6 66.2 66.2 66.2 66.2 66.2 66.4 65.6 64.9 64.8 64.0 64.6 65.6	37.8 28.0 26.2 25.5 30.4 28.2 29.5 31.1 30.9 24.9 26.7 27.5 27.5 25.0 25.2 25.0 25.2 25.6 30.2 25.2 25.0 25.3 25.3 27.5 27.5 27.5 27.5 27.5 27.5 27.5 27.5	71.2 71.4 71.3 71.4 70.9 71.4 71.1 71.8 70.9 70.4 70.5 70.3 70.0 70.5 69.2 69.4 69.0 69.0 68.8	61.1 61.0 61.9 61.5 60.9 61.8 60.8 61.1 61.2 61.2 61.0 60.7 60.6 60.7 60.6 60.7 60.6 59.4 59.4 59.7	27.7 33.9 31.9 31.5 31.0 27.8 29.9 32.1 30.0 27.9 26.7 27.1 30.7 28.3 27.6 29.0 28.9 29.0 28.9 29.0 28.9 29.0 29.7 29.0 27.8 27.8 29.0 27.8 27.9 27.8 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27.9	64.3 63.8 64.9 64.5 64.1 64.0 64.7 63.8 64.5 64.5 63.9 63.9 63.3 64.0 63.8 63.7 63.9 63.8 63.7 63.9 63.8 63.7 63.9 63.8

 $<sup>^1</sup>$  Civilian labor force as percent of civilian noninstitutional population in group specified.  $^2$  See footnote 1, Table B–37.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B—35.

Table B-41. Civilian employment/population ratio by demographic characteristic, 1968-2009

				•	White 2	monuny		,	,		nd other o	r black or a	African A	merican <sup>2</sup>	?
V d	All civilian			Males			Female	S			Males			Females	
Year or month	work- ers	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
											Bla	ack and oth	ner <sup>2</sup>		
1968 1969	57.5 58.0	57.4 58.0	78.3 78.2	50.3 51.1	81.6 81.4	38.9 40.1	37.8 39.5	39.1 40.1	58.0 58.1	73.3 72.8	38.7 39.0	78.9 78.4	45.2 45.9	24.7 25.1	48.2 48.9
1970 1971 1972	57.4 56.6 57.0	57.5 56.8 57.4	76.8 75.7 76.0	49.6 49.2 51.5	80.1 79.0 79.0	40.3 39.9 40.7	39.5 38.6 41.3	40.4 40.1 40.6	56.8 54.9 54.1	70.9 68.1 67.3	35.5 31.8 32.4	76.8 74.2 73.2	44.9 43.9 43.3	22.4 20.2 19.9	48.2 47.3 46.7
											Black or	African A	merican <sup>2</sup>	2	
1972	57.0 57.8 57.8 57.8 57.8 57.8 56.1 57.8 56.1 57.9 59.2 59.0 59.2 59.0 60.1 61.5 56.3 62.8 61.7 62.5 61.7 62.5 64.1 64.3 64.4 64.4 64.4 64.4 64.4 64.4 64.4	57.4 2 58.2 3 56.7 57.5 5 58.6 60.0 60.0 60.0 60.0 60.5 58.9 60.5 62.3 63.8 63.7 62.4 62.7 63.8 64.1 64.6 64.7 64.9 64.9	76.0 76.5 76.5 73.0 73.0 73.1 75.0 75.1 75.1 75.1 75.1 75.1 75.1 75.1 75.1	51.5 54.4 50.6 51.5 54.4 50.6 51.5 55.7 53.4 47.0 49.1 49.6 49.9 49.6 48.3 49.4 48.2 48.3 49.4 48.2 49.3 49.5	79.0 79.2 78.6 76.5 77.2 77.3 75.6 75.1 73.0 72.6 74.3 74.3 74.3 74.7 75.1 75.1 73.5 73.5 73.5 73.6 73.8 74.2 74.7 74.7	40.7 41.8 42.4 42.0 43.2 44.5 44.5 47.8 48.3 48.1 51.7 51.7 52.8 54.6 54.7 54.2 54.2 55.8 56.1 57.0 57.1 57.1 57.1	41.3 43.4 44.3 42.5 44.5 45.9 46.2 44.6 47.0 47.0 47.0 49.0 49.0 45.7 45.7 45.7 45.7 45.7 45.7 45.7 45.9 46.2 46.2 46.2 46.2 46.2 46.2 46.2 46.2	40.6 6 41.6 42.2 41.9 43.1 44.4 46.1 47.3 47.8 48.5 50.0 51.0 52.0 55.2 56.4 56.7 57.0 55.0 58.0 58.0	53.7 54.5 50.1 50.8 50.1 50.8 51.4 53.6 51.3 51.3 51.3 51.3 51.3 56.9 56.7 56.7 56.7 57.1 57.4 57.1 57.4 57.6 66.9 66.9	66.8 67.5 65.8 60.6 60.6 60.6 60.6 60.6 60.6 60.6 60	31.6 32.8 31.4 26.3 31.4 26.3 25.8 28.7 27.0 20.3 20.4 20.3 20.4 20.3 20.4 20.3 20.4 20.3 20.4 20.3 20.4 20.3 20.4 20.4 20.3 20.4 20.4 20.4 20.4 20.4 20.4 20.4 20.4	73.0 73.7 71.9 66.5 69.1 69.1 69.1 65.8 61.4 61.6 64.1 67.0 67.1 65.3 65.3 65.1 65.5 66.1 67.5 67.7	43.0 43.8 43.5 41.6 42.8 43.3 44.0 45.7 45.1 44.1 48.8 50.3 51.2 51.2 51.9 65.0 50.8 50.8 50.8 50.3 53.4 54.5 57.2 58.6 58.6 58.6 58.6 58.6 58.6 58.6 58.6	19.2 20.9 20.9 19.2 21.8 22.1 22.4 21.0 20.1 22.1 27.1 23.8 25.8 25.8 21.5 25.8 21.5 26.1 27.1 21.6 26.1 27.1 27.1 28.5 26.1 27.1 28.5 27.2 28.5 29.6 29.6 29.6 29.6 29.6 29.6 29.6 29.6	46.5 47.2 46.9 44.9 46.4 47.0 49.3 49.3 49.1 47.5 47.4 49.8 50.9 51.6 53.6 53.6 53.8 55.0 55.1 57.1 58.1 59.7 61.5
2000   2001   2002   2003   2003   2006   2006   2006   2006   2008   2008   2008   2008   2008   2008   2009   2008   2009   2008   2009   20	64.4 63.7 62.7 62.3 62.7 63.1 63.1 62.2 62.9 62.8 62.9 62.7 62.7 62.7 62.7 62.7 63.1 63.0 63.0 63.0 63.0 63.0 63.0 63.0 63.0	64.9 64.2 63.0 63.1 63.8 63.2 63.5 63.2 63.1 63.2 63.3 63.2 63.0 62.7 62.7 60.8 60.6 60.3 60.2 60.1 59.7 59.4	73.0 72.0 70.1 70.1 70.8 70.7 70.8 69.7 70.5 70.3 70.0 69.7 70.0 69.3 69.3 69.3 69.3 69.3 66.3 66.3 66.3	49.5 46.2 39.4 42.3 39.4 42.3 39.4 7 39.8 8 40.0 37.0 34.2 35.1 37.6 37.6 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0	74.9 74.0 73.1 72.5 72.8 73.3 73.7 73.5 72.4 68.7 73.5 72.9 72.8 72.0 71.7 71.2 70.6 68.8 68.9 69.0 68.8 68.7 68.7 68.5 68.1	57.4 0.5 56.3 1.5 56.	48.8 46.5 40.3 44.1 41.5 37.1 41.8 37.1 33.4 41.1 33.4 37.5 36.7 35.2 36.5 43.4 8 34.7 33.4 32.3 33.4 33.4	58.0 57.7 57.3 57.2 57.4 57.7 57.9 57.8 56.8	60.9 59.7 57.4 57.2 58.4 4 57.3 2 58.2 57.7 57.4 58.4 57.3 58.2 57.7 57.4 58.4 57.3 57.4 56.4 57.3 57.4 56.4 57.5 57.5 57.5 57.5 57.5 57.5 57.5 57	63.6 62.1 62.1 65.5 59.3 60.2 60.6 60.2 60.6 60.2 60.6 60.1 60.8 59.7 59.7 59.7 59.7 59.7 59.7 59.7 55.0 55.2 52.8 55.2 52.8 55.2 60.2 60.2 60.2 60.2 60.2 60.2 60.2 60	28.9 26.4 25.6 6 29.9 20.8 8.7 7.1 19.3 19.3 19.3 19.3 19.3 19.3 19.3 19	67.7 66.3 64.1 63.9 64.7 65.5 65.5 65.5 65.4 65.5 65.4 64.6 61.7 61.1 60.4 61.1 58.5 58.2 62.8 62.8 63.7 65.3 65.5 65.5 65.5 65.5 65.5 65.5 65.5	58.6 6 57.8 8 55.6 5 55.7 7 56.5 5 55.7 56.5 5 55.7 56.5 5 55.7 56.5 5 56.4 4 56.0 56.4 4 56.0 56.4 5 56.9 5 55.9 5 55.3 2 5 56.7 5 56.2 5 56.7 5 56.2 5 56.7 5 56.2 5 56.7 5 56.2 5 56.3 5 56.2 5 56.3 5 56.2 5 56.3 5 56.2 5 56.3 5 56.2 5 56.3 5 56.2 5 56.3 5 56.2 5 56.3 5 56.2 5 56.3 5 56.2 5 56.3 5 56.	30.6 27.0 24.9 23.4 22.4 26.4 4.6 27.4 26.4 26.4 27.7 27.7 27.7 27.7 27.7 27.7 27.7 27	61.3 60.7 58.6 58.5 58.9 59.8 59.1 59.1 59.5 59.6 59.3 59.2 58.8 57.9 57.9 58.6 58.7 57.4 56.4 56.1 55.5 55.0 56.4 56.1 55.5 55.0

 $<sup>^{\</sup>rm 1}$  Civilian employment as percent of civilian noninstitutional population in group specified.  $^{\rm 2}$  See footnote 1, Table B–37.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–35.

## Table B-42. Civilian unemployment rate, 1962-2009

[Percent 1; monthly data seasonally adjusted, except as noted]

			Males	-	, , , , ,	Female	s seaso	liany au	dotou, ox		race		100		
Year or month	All civilian work- ers	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	Both sexes 16–19 years	White <sup>2</sup>	Black and other <sup>2</sup>	Black or African Ameri- can <sup>2</sup>	Asian (NSA) <sup>2, 3</sup>	Hispanic or Latino ethnic- ity <sup>4</sup>	Married men, spouse pres- ent	Women who maintain families (NSA) <sup>3</sup>
1962 1963 1964 1965 1966 1967	5.5 5.7 5.2 4.5 3.8 3.8 3.6	5.2 5.2 4.6 4.0 3.2 3.1 2.9	14.7 17.2 15.8 14.1 11.7 12.3 11.6	4.6 4.5 3.9 3.2 2.5 2.3 2.2 2.1	6.2 6.5 6.2 5.5 4.8 5.2 4.8	14.6 17.2 16.6 15.7 14.1 13.5 14.0	5.4 5.2 4.5 3.8 4.2 3.8	14.7 17.2 16.2 14.8 12.8 12.9 12.7	4.9 5.0 4.6 4.1 3.4 3.4 3.2	10.9 10.8 9.6 8.1 7.3 7.4 6.7				3.6 3.4 2.8 2.4 1.9 1.8 1.6	4.9 4.4
1970 1971 1971 1972 1973 1974 1975	3.5 4.9 5.9 5.6 4.9 5.6 8.5 7.7	2.8 4.4 5.3 5.0 4.2 4.9 7.9 7.1	11.4 15.0 16.6 15.9 13.9 15.6 20.1	2.1 3.5 4.4 4.0 3.3 3.8 6.8 5.9	4.7 5.9 6.9 6.6 6.0 6.7 9.3 8.6	13.3 15.6 17.2 16.7 15.3 16.6 19.7 18.7	3.8 3.7 4.8 5.7 5.4 4.9 5.5 8.0 7.4	12.2 15.3 16.9 16.2 14.5 16.0 19.9	3.1 4.5 5.4 5.1 4.3 5.0 7.8 7.0	6.4 8.2 9.9 10.0 9.0 9.9 13.8	10.4 9.4 10.5 14.8 14.0		7.5 8.1 12.2 11.5	1.5 2.6 3.2 2.8 2.3 2.7 5.1 4.2	4.4 5.4 7.3 7.2 7.1 7.0 10.0 10.1
1977 1978 1979 1980 1981 1982 1983	7.1 6.1 5.8 7.1 7.6 9.7 9.6	6.3 5.3 5.1 6.9 7.4 9.9 9.9	17.3 15.8 15.9 18.3 20.1 24.4 23.3	5.2 4.3 4.2 5.9 6.3 8.8 8.9	8.2 7.2 6.8 7.4 7.9 9.4 9.2	18.3 17.1 16.4 17.2 19.0 21.9 21.3	7.0 6.0 5.7 6.4 6.8 8.3 8.1	17.8 16.4 16.1 17.8 19.6 23.2 22.4	6.2 5.2 5.1 6.3 6.7 8.6 8.4	13.1 11.9 11.3 13.1 14.2 17.3 17.8	14.0 12.8 12.3 14.3 15.6 18.9 19.5		10.1 9.1 8.3 10.1 10.4 13.8 13.7	3.6 2.8 2.8 4.2 4.3 6.5 6.5	9.4 8.5 8.3 9.2 10.4 11.7 12.2
1984 1985 1986 1987 1988 1989	7.5 7.2 7.0 6.2 5.5 5.3	7.4 7.0 6.9 6.2 5.5 5.2	19.6 19.5 19.0 17.8 16.0 15.9	6.6 6.2 6.1 5.4 4.8 4.5	7.6 7.4 7.1 6.2 5.6 5.4	18.0 17.6 17.6 15.9 14.4 14.0	6.8 6.6 6.2 5.4 4.9 4.7	18.9 18.6 18.3 16.9 15.3 15.0	6.5 6.2 6.0 5.3 4.7 4.5	14.4 13.7 13.1 11.6 10.4 10.0	15.9 15.1 14.5 13.0 11.7 11.4		10.7 10.5 10.6 8.8 8.2 8.0	4.6 4.3 4.4 3.9 3.3 3.0 3.4 4.4	10.3 10.4 9.8 9.2 8.1 8.1 8.3 9.3 10.0
1991 1992 1993 1994 1995 1996 1997 1998	6.8 7.5 6.9 6.1 5.6 5.4 4.9 4.5	7.2 7.9 7.2 6.2 5.6 5.4 4.9 4.4 4.1	19.8 21.5 20.4 19.0 18.4 18.1 16.9 16.2 14.7	6.4 7.1 6.4 5.4 4.8 4.6 4.2 3.7 3.5	6.4 7.0 6.6 6.0 5.6 5.4 5.0 4.6 4.3	17.5 18.6 17.5 16.2 16.1 15.2 15.0 12.9 13.2	5.7 6.3 5.9 5.4 4.9 4.8 4.4 4.1 3.8	18.7 20.1 19.0 17.6 17.3 16.7 16.0 14.6 13.9	6.1 6.6 6.1 5.3 4.9 4.7 4.2 3.9 3.7	11.1 12.7 11.7 10.5 9.6 9.3 8.8 7.8 7.0	12.5 14.2 13.0 11.5 10.4 10.5 10.0 8.9 8.0		10.0 11.6 10.8 9.9 9.3 8.9 7.7 7.2 6.4	4.4 5.1 4.4 3.7 3.3 3.0 2.7 2.4 2.2	9.3 10.0 9.7 8.9 8.0 8.2 8.1 7.2 6.4
2000	4.0 4.7 5.8 6.0 5.5 5.1 4.6 4.6 5.8 9.3	3.9 4.8 5.9 6.3 5.6 5.1 4.6 4.7 6.1 10.3	14.0 16.0 18.1 19.3 18.4 18.6 16.9 17.6 21.2 27.8	3.3 4.2 5.3 5.6 5.0 4.4 4.0 4.1 5.4	4.1 4.7 5.6 5.7 5.4 5.1 4.6 4.5 5.4 8.1	12.1 13.4 14.9 15.6 15.5 14.5 13.8 13.8 16.2 20.7	3.6 4.1 5.1 5.1 4.9 4.6 4.1 4.0 4.9 7.5	13.1 14.7 16.5 17.5 17.0 16.6 15.4 15.7 18.7 24.3	3.5 4.2 5.1 5.2 4.8 4.4 4.0 4.1 5.2 8.5		7.6 8.6 10.2 10.8 10.4 10.0 8.9 8.3 10.1 14.8	3.6 4.5 5.9 6.0 4.4 4.0 3.0 3.2 4.0 7.3	5.7 6.6 7.5 7.7 7.0 6.0 5.2 5.6 7.6	2.0 2.7 3.6 3.8 3.1 2.8 2.4 2.5 3.4 6.6	5.9 6.6 8.0 8.5 8.0 7.8 7.1 6.5 8.0
2008: Jan Feb Apr Apr June July Aug Sept Oct Nov Dec	5.0 4.8 5.1 5.0 5.4 5.5 6.1 6.2 6.6 7.4	5.1 4.9 5.2 5.1 5.6 5.8 6.2 6.4 6.8 7.1 7.5	21.2 18.4 17.8 17.1 20.8 21.1 24.1 20.7 21.3 24.2 23.8 23.2	4.4 4.6 4.6 4.9 5.1 5.4 5.7 6.1 6.4 7.4	4.7 4.9 4.7 5.3 5.3 5.9 5.5 5.9 6.2 6.6	14.4 14.6 14.2 14.1 16.9 16.8 17.3 17.2 17.1 16.1 16.6 18.3	4.2 4.5 4.3 4.7 4.7 5.4 5.0 5.4 6.0	17.8 16.5 16.0 15.6 18.9 19.0 20.8 18.9 19.3 20.3 20.3	4.4 4.5 4.4 4.8 5.0 5.2 5.5 6.0 6.3 6.7		9.2 8.3 9.1 8.6 9.6 9.9 10.8 11.4 11.3 11.5	3.2 3.0 3.6 3.2 3.8 4.5 4.0 4.4 3.8 3.8 4.8	6.4 6.2 6.9 6.9 7.7 7.5 8.0 8.9 8.8 9.4	2.7 2.9 2.8 2.9 3.0 3.3 3.6 3.9 4.1 4.3	7.0 6.7 7.1 6.8 6.9 7.9 8.5 9.6 8.2 8.8 9.3
2009: Jan Feb Mar Apr June July Aug Sept Oct Nov	7.4 7.7 8.2 8.6 8.9 9.4 9.5 9.4 9.7 9.8 10.1 10.0	8.5 9.0 9.6 10.1 10.5 10.6 10.5 11.0 11.4 11.2	23.2 24.4 25.0 25.9 25.9 27.1 26.5 27.9 29.9 29.9 31.0 30.4 30.9	7.4 7.8 8.4 8.9 9.4 9.8 10.0 9.8 10.2 10.3 10.6 10.4	6.9 7.3 7.6 7.6 8.1 8.3 8.2 8.3 8.5 8.8	17.3 18.6 18.2 17.6 19.1 22.1 20.9 21.4 22.2 24.0 23.1 23.1	6.4 6.8 7.1 7.2 7.5 7.6 7.6 7.7 7.9 8.1 8.0	20.9 21.8 22.0 21.8 23.2 24.3 24.5 25.7 26.1 27.6 26.8 27.1	7.0 7.5 8.0 8.1 8.6 8.7 8.7 8.9 9.1 9.4 9.3		12.1 12.8 13.5 13.5 15.0 14.8 14.7 15.2 15.5 15.7	5.1 6.2 6.9 6.4 6.6 6.7 8.2 8.3 7.5 7.4 7.5 7.3	9.9 11.0 11.6 11.4 12.7 12.3 12.4 13.0 12.7 13.1 12.7	5.1 5.6 6.0 6.3 6.7 6.9 7.1 7.3 7.5 7.5	10.3 10.3 10.8 10.0 11.0 11.7 12.6 12.2 11.6 12.9 11.4

Unemployed as percent of civilian labor force in group specified.
 See footnote 1, Table B-37.
 Not seasonally adjusted (NSA).
 Persons whose ethnicity is identified as Hispanic or Latino may be of any race.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–35.

Source: Department of Labor (Bureau of Labor Statistics).

TABLE B-43. Civilian unemployment rate by demographic characteristic, 1968-2009

					White 2	,	uata sce				d other or	black or	African A	merican <sup>2</sup>	
	All			Males			Females				Males			Females	
Year or month	civilian work- ers	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over	Total	Total	16–19 years	20 years and over	Total	16–19 years	20 years and over
											Bla	ck and ot	her <sup>2</sup>		
1968 1969	3.6 3.5	3.2 3.1	2.6 2.5	10.1 10.0	2.0 1.9	4.3 4.2	12.1 11.5	3.4 3.4	6.7 6.4	5.6 5.3	22.1 21.4	3.9 3.7	8.3 7.8	28.7 27.6	6.3 5.8
1970 1971	4.9 5.9	4.5 5.4	4.0 4.9	13.7 15.1	3.2 4.0	5.4 6.3	13.4 15.1	4.4 5.3	8.2 9.9	7.3 9.1	25.0 28.8	5.6 7.3	9.3 10.9	34.5 35.4	6.9 8.7
1972	5.6	5.1	4.5	14.2	3.6	5.9	14.2	4.9	10.0	8.9	29.7	6.9	11.4	38.4	8.8
1070							440		40.4				merican <sup>2</sup>		
1972 1973	5.6 4.9 5.6	5.1 4.3 5.0	4.5 3.8 4.4	14.2 12.3 13.5	3.6 3.0	5.9 5.3	14.2 13.0 14.5	4.9 4.3	10.4 9.4 10.5	9.3 8.0 9.8	31.7 27.8 33.1	7.0 6.0 7.4	11.8 11.1 11.3	40.5 36.1 37.4	9.0 8.6
1974 1975 1976	8.5 7.7	7.8 7.0	7.2 6.4	18.3 17.3	3.5 6.2 5.4	6.1 8.6 7.9	17.4 16.4	5.1 7.5 6.8	14.8 14.0	14.8 13.7	38.1 37.5	12.5 11.4	14.8 14.3	41.0 41.6	8.8 12.2 11.7
1977 1978	7.1 6.1	6.2 5.2	5.5 4.6	15.0 13.5	4.7 3.7	7.3 6.2	15.9 14.4	6.2 5.2	14.0 12.8	13.3 11.8	39.2 36.7	10.7	14.9	43.4 40.8	12.3 11.2
1979	5.8 7.1	5.1	4.5 6.1	13.9	3.6 5.3	5.9 6.5	14.0	5.0	12.3	11.4	34.2 37.5	9.3 12.4	13.3	39.1 39.8	10.9
1981	7.6 9.7	6.7 8.6	6.5 8.8	17.9 21.7	5.6 7.8	6.9 8.3	16.6 19.0	5.9 7.3	15.6 18.9	15.7 20.1	40.7 48.9	13.5 17.8	15.6 17.6	42.2 47.1	13.4 15.4
1983	9.6 7.5	8.4 6.5	8.8 6.4	20.2 16.8	7.9 5.7	7.9 6.5	18.3 15.2	6.9 5.8	19.5 15.9	20.3 16.4	48.8 42.7	18.1 14.3	18.6 15.4	48.2 42.6	16.5 13.5
1985 1986	7.2 7.0	6.2 6.0	6.1 6.0	16.5 16.3	5.4 5.3	6.4 6.1	14.8 14.9	5.7 5.4	15.1 14.5	15.3 14.8	41.0 39.3	13.2 12.9	14.9 14.2	39.2 39.2	13.1 12.4
1987 1988	6.2 5.5	5.3 4.7	5.4 4.7	15.5 13.9	4.8 4.1	5.2 4.7	13.4	4.6 4.1	13.0 11.7	12.7	34.4 32.7	11.1	13.2	34.9 32.0	11.6 10.4
1989	5.3 5.6	4.5 4.8	4.5 4.9	13.7	3.9 4.3	4.5 4.7	11.5 12.6	4.0 4.1	11.4	11.5 11.9	31.9 31.9	10.0 10.4	11.4	33.0 29.9	9.8 9.7
1991	6.8 7.5 6.9	6.1 6.6	6.5 7.0 6.3	17.6 18.5 17.7	5.8 6.4 5.7	5.6 6.1	15.2 15.8 14.7	5.0 5.5 5.2	12.5 14.2 13.0	13.0 15.2 13.8	36.3 42.0 40.1	11.5 13.5 12.1	12.0 13.2 12.1	36.0 37.2 37.4	10.6 11.8 10.7
1993 1994 1995	6.1 5.6	6.1 5.3 4.9	5.4 4.9	16.3 15.6	4.8 4.3	5.7 5.2 4.8	13.8 13.4	4.6 4.3	11.5 10.4	12.0 10.6	37.6 37.1	10.3 8.8	11.0	32.6 34.3	9.8 8.6
1996 1997	5.4 4.9	4.7 4.2	4.7 4.2	15.5 14.3	4.1 3.6	4.7 4.2	12.9 12.8	4.1 3.7	10.5 10.0	11.1	36.9 36.5	9.4 8.5	10.0	30.3 28.7	8.7 8.8
1998 1999	4.5 4.2	3.9 3.7	3.9 3.6	14.1 12.6	3.2 3.0	3.9 3.8	10.9 11.3	3.4 3.3	8.9 8.0	8.9 8.2	30.1 30.9	7.4 6.7	9.0 7.8	25.3 25.1	7.9 6.8
2000 2001	4.0 4.7	3.5 4.2	3.4 4.2	12.3 13.9	2.8 3.7	3.6 4.1	10.4 11.4	3.1 3.6	7.6 8.6	8.0 9.3	26.2 30.4	6.9 8.0	7.1 8.1	22.8 27.5	6.2 7.0
2002	5.8 6.0	5.1 5.2	5.3 5.6	15.9 17.1	4.7 5.0	4.9 4.8	13.1 13.3	4.4 4.4	10.2 10.8	10.7 11.6	31.3 36.0	9.5 10.3	9.8	28.3 30.3	8.8 9.2
2004	5.5 5.1	4.8 4.4	5.0 4.4	16.3 16.1	4.4 3.8	4.7 4.4	13.6 12.3	4.2 3.9	10.4 10.0	11.1 10.5	35.6 36.3	9.9 9.2	9.8 9.5	28.2 30.3	8.9 8.5
2006	4.6 4.6	4.0 4.1	4.0 4.2	14.6 15.7	3.5 3.7	4.0 4.0	11.7 12.1	3.6 3.6	8.9 8.3	9.5 9.1	32.7 33.8	8.3 7.9	8.4 7.5	25.9 25.3	7.5 6.7
2008 2009	5.8 9.3	5.2 8.5	5.5 9.4	19.1 25.2	4.9 8.8	4.9 7.3	14.4 18.4	4.4 6.8	10.1 14.8	11.4 17.5	35.9 46.0	10.2 16.3	8.9 12.4	26.8 33.4	8.1 11.5
2008: Jan Feb	5.0 4.8	4.4 4.4	4.6 4.5	19.1 16.8	3.9 4.0	4.2 4.2	12.8 11.9	3.8 3.8	9.2 8.3	10.1 9.0	38.0 31.1	8.3 8.0	8.3 7.7	28.7 30.3	7.5 6.5
Mar Apr	5.1 5.0	4.5 4.4	4.5 4.6	14.5 15.4	4.1 4.1	4.4 4.2	11.8 13.2	4.0 3.7	9.1 8.6	9.8 9.2	39.1 27.4	8.5 8.4	8.6 8.2	26.5 22.9	7.7 7.5
May June	5.4 5.5	4.8 5.0	5.0 5.1	18.1	4.4 4.5	4.6 4.7	15.4 15.0	4.1 4.2 4.2	9.6 9.4 9.9	10.4	39.4 35.5	9.0 9.6	8.8 8.2	24.7 24.0	8.1 7.5
July Aug Sept	5.8 6.1 6.2	5.2 5.5 5.5	5.5 5.7 6.0	22.3 19.5 19.7	4.8 5.1 5.4	4.8 5.2 4.8	15.5 14.5 15.2	4.2 4.8 4.3	10.8 11.4	11.7 11.5 13.0	38.7 29.8 32.8	10.4 10.6 12.0	8.3 10.1 10.0	27.3 30.1 27.3	7.5 9.2 9.2
Oct Nov	6.6 6.9	6.0 6.3	6.4 6.8	21.8 21.4	5.8 6.1	5.4 5.6	14.2 15.4	4.9 5.2	11.3	13.3	39.5 42.5	11.9 12.4	9.6 9.6	26.3 21.9	8.9 9.2
Dec	7.4	6.7	7.2	21.5	6.6	6.2	16.3	5.7 5.9	12.1	14.7	35.3	13.8	9.8	31.3	8.9
2009: Jan Feb Mar	7.7 8.2 8.6	7.0 7.5 8.0	7.6 8.2 8.7	22.0 22.4 23.5	7.0 7.6 8.1	6.3 6.6 7.0	16.3 17.1	6.1 6.5	12.8 13.5 13.5	15.7 16.4 16.6	44.4 45.6 41.7	14.4 15.1 15.6	10.3 11.0 10.8	30.1 32.5 26.0	9.4 10.1 10.1
Apr May	8.9 9.4	8.1 8.6	9.1 9.7	22.9 24.6	8.5 9.0	6.9 7.4	17.1 16.6	6.4 6.9	15.0 15.0	18.4	41.7 46.2	17.2 16.7	12.1	28.2 34.8	10.1 11.4 11.3 11.5 11.9
June July	9.5 9.4	8.7 8.7	9.8 9.8	24.4 26.1	9.2 9.1	7.4 7.4	19.0 18.7	6.8 6.8	14.8 14.7	17.9 17.5 17.0	44.8 39.2	16.4 16.0	12.4	33.1 33.5	11.5 11.9
Aug Sept	9.7 9.8	8.9 9.1	10.1 10.2	28.1 26.8	9.3 9.6 9.9	7.5 7.6	20.2 19.7	7.0 7.1	15.2 15.5	18.2 18.0	46.8 50.8	17.0 16.5	12.7 13.3	24.5 32.7	12.2 12.5 12.5
Oct Nov	10.1 10.0	9.4 9.3	10.6 10.4	28.6 26.0	9.8	8.0 7.9	21.4 20.0	7.4 7.4	15.7 15.6	18.1 18.7	43.6 57.1	17.0 16.8	13.6 12.8	40.7 41.4	11.7
Dec	10.0	9.0	10.0	27.4	9.3	8.0	19.8	7.4	16.2	18.2	52.2	16.6	14.3	44.8	13.1

<sup>&</sup>lt;sup>1</sup> Unemployed as percent of civilian labor force in group specified. <sup>2</sup> See footnote 1, Table B–37.

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–35.

Table B-44. Unemployment by duration and reason, 1962-2009

[Thousands of persons, except as noted; monthly data seasonally adjusted 1]

1962   3,911   1,663   1,134   534   585   14.7	Re- entrants New entrant 945 3: 995 4: 1,228 5: 1,472 6:
Merk   Merk	945 33 909 44 965 4 1,228 56
1964     3,786     1,697     1,117     491     482     13.3          1965     3,66     1,628     983     404     351     11.8	909 40 965 4 1,228 50 1,472 66
1964     3,786     1,697     1,117     491     482     13.3          1965     3,66     1,628     983     404     351     11.8	909 40 965 4 1,228 50 1,472 66
1966	909 40 965 4 1,228 50 1,472 66
1968	909 40 965 4 1,228 50 1,472 66
1969	1 472 6:
1970   4 093   2 139   1 290   428   235   8 6   4 9   1 811   675   1 137   550	1,472 6.
1972	
1973	1,340 64 1,463 68
1975	1,892   82
1977   6.991   2.919   2.132   913   1.028   14.3   7.0   3.166   865   2.300   909	1,928 89 1,963 99
1978         6,202         2,865         1,923         766         648         11.9         5.9         2,585         712         1,873         874           1979         6,137         2,950         1,946         706         535         10.8         5.4         2,635         851         1,784         880	1,857 88 1,806 8
1980	1,927 87
1981	2,102 98 2,384 1,18
1983	2,412 1,2
1985 8,312 3,498 2,509 1,025 1,280 15.6 6.8 4,139 1,157 2,982 877	2,256   1,03
1986   8237  3.448  2.557  1.045  1.187   15.0  6.9  4.033  1.090  2.943  1.015	2,160 1,02 1,974 92
1988 6,701 3,084 2,007 801 809 13.5 5.9 3,092 851 2,241 983	1,809 8 1,843 6
1989	1,930 68
1990         7,047         3,265         2,257         822         703         12,0         5,3         3,387         1,028         2,359         1,041           1991         8,628         3,480         2,791         1,246         1,111         13,7         6,8         4,694         1,292         3,402         1,004           1992         9,613         3,376         2,830         1,453         1,954         17,7         8,7         5,389         1,260         4,129         1,002	2,139 79 2,285 93
1993 8,940 3,262 2,584 1,297 1,798 18.0 8.3 4,848 1,115 3,733 976	2,198 9
1994	2,786 60 2,525 5
1996	2,512 58 2,338 56
1998 6,210   2,622   1,950   763   875   14.5   6.7   2,822   866   1,957   734	2,132 52
1999	2,005 46 1,961 43
2001 6,801 2,853 2,196 951 801 13.1 6.8 3,476 1,067 2,409 835	2,031 4
2002         8.378         2.893         2.580         1.369         1.535         1 6.6         9.1         4,607         1,124         3,483         866           2003         8.774         2,785         2,612         1,442         1,936         19.2         10.1         4,838         1,121         3,717         818           2004         8,149         2,696         2,382         1,293         1,779         19.6         9.8         4,197         998         3,199         858	2,368 50 2,477 64
2004	2,408 68 2,386 68
2006   7001   2614   2121   1031   1235   16.8   8.3   3321   921   2400   827	2,237 6
2008 8,924   2,932   2,804   1,427   1,761   17.9   9.4   4,789   1,176   3,614   896	2,142 62 2,472 76 3,187 1,03
2009 14,265 3,165 3,828 2,7/5 4,496 24.4 15.1 9,160 1,630 7,530 882	
2008: Jan	2,113 66
Feb. 7,435 2,623 2,378 1,106 1,313 16.9 8.6 3,870 996 2,875 781 Mar 7,793 2,759 2,494 1,156 1,316 16.4 8.4 4,144 1,065 3,078 794 Apr 7,631 2,468 2,504 1,294 1,374 17.0 9,3 4,016 1,094 2,922 860	2,123 70 2,128 65
May	2,485 80 2,506 7
.lulv   8.895   2.872   2.834   1.427   1.679    17.1   9.7   4.589   1.041   3.549   871	2.703   83
Sent   9.569   2.916   3.073   1.613   2.014    18.6   10.2   5.275   1.366   3.909   982	2,657 82 2,594 8
Oct	2,651 82 2,697 73
Dec	2,802 82
2009: Jan     11,919     3,633     3,622     2,073     2,689     19,9     10.6     7,251     1,468     5,784     912       Feb     12,714     3,364     3,961     2,405     2,964     20.0     11,4     7,878     1,519     6,359     820	2,792 79 2,912 1,0
Mar	3,017   88
May	3,127 9° 3,200 9°
June     14,721     3,152     3,994     3,404     4,440     24.4     18.2     9,562     1,741     7,821     822       July     14,534     3,181     3,539     2,847     4,972     25.3     15.9     9,549     1,670     7,880     882	3,322 96 3,306 99
Δim   1/4 993   2 992   /4 1093   2 825   5 102/    25 2   15 5   9 81/   1 70/   8 110   835	3.294 1.09
Sept.         15,159         2,938         3,838         2,958         5,447         26.5         17.8         10,236         1,918         8,318         869           Oct         15,612         3,131         3,671         3,184         5,620         27.2         19.0         10,261         1,671         8,590         909	3,255 1,13 3,461 1,1
Nov	3,221 1,27 3,334 1,27

Note: Data relate to persons 16 years of age and over. See footnote 5 and Note, Table B–35.

Because of independent seasonal adjustment of the various series, detail will not sum to totals.
 For 1967, the sum of the unemployed categorized by reason for unemployment does not equal total unemployment.
 Beginning with January 1994, job losers and persons who completed temporary jobs.

TABLE B-45. Unemployment insurance programs, selected data, 1980-2009

[Thousands of persons, except as noted]

	All prog	grams <sup>1</sup>			Regi	ular State prog	ırams		
Year or month	Insured unemploy- ment (weekly average) <sup>2</sup>	Total benefits paid (millions of dollars)	Covered employ- ment <sup>3</sup>	Insured unemploy- ment (weekly average) <sup>2</sup>	Initial claims (weekly average)	Exhaustions (weekly average) 4	Insured unemploy-ment as percent of covered employment	Total (millions of dollars)	Average weekly check (dollars) <sup>5</sup>
1980	3,521 3,248 4,836 5,216 3,160 2,751 2,667 2,349 2,122 2,158	16,668 15,910 26,649 31,615 18,201 16,441 16,325 14,632 13,500 14,618	86,918 87,783 86,148 86,867 91,378 94,027 95,946 98,760 101,987 104,750	3,356 3,045 4,059 3,395 2,475 2,617 2,621 2,300 2,081 2,156	488 460 583 438 377 397 378 328 310 330	59 57 80 80 50 49 52 46 38	3.9 3.5 4.7 3.9 2.7 2.8 2.7 2.3 2.0 2.1	14,887 14,568 21,769 19,025 13,642 14,941 16,188 14,561 13,483 14,603	99.06 106.61 119.34 123.59 123.47 128.09 135.65 140.39 144.74 151.43
1990	2,527 3,514 4,906 4,188 2,941 2,648 2,656 2,372 2,264 2,223	18,452 27,004 39,669 34,649 24,261 22,026 22,397 20,333 20,091 21,037	106,325 104,642 105,187 107,263 110,526 113,504 116,078 119,159 122,427 125,280	2,522 3,342 3,245 2,751 2,670 2,572 2,595 2,323 2,222 2,188	388 447 408 341 340 357 356 323 321 298	45 67 74 62 57 51 53 48 44 44	2.4 3.2 3.1 2.6 2.4 2.3 2.2 1.9 1.8 1.7	18,413 25,924 26,048 22,599 22,338 21,925 22,349 20,287 20,017 21,001	161.20 169.56 173.38 179.41 181.91 187.04 189.27 192.84 200.58 212.10
2000 2001 2002 2003 2004 2005 2006 2007 2008	2,143 3,012 4,453 4,400 3,103 2,709 2,521 2,612 3,898 8,943	21,005 32,227 53,350 53,352 36,495 32,154 30,917 33,212 51,798 139,826	128,054 127,923 126,545 126,084 127,618 129,929 132,177 133,688 133,076 127,507	2,110 2,974 3,585 3,531 2,950 2,661 2,476 2,572 3,306 5,724	301 404 407 404 345 328 313 324 424 565	41 54 85 85 68 55 51 51 66 141	1.6 2.3 2.8 2.8 2.3 2.0 1.9 1.9 2.5 4.5	20,983 32,135 42,266 41,896 35,034 32,098 30,852 33,156 43,764 80,681	221.01 238.07 256.79 261.67 262.50 266.63 277.20 287.73 297.10 309.85
2008: Jan	3,764 3,422 3,735 3,346 2,938 3,269 3,839 4,789 5,075 4,562 4,693 7,245	3,873.8 3,558.2 3,781.6 3,568.6 2,996.2 3,149.2 3,844.8 4,737.2 5,289.3 4,719.4 4,515.6 7,763.9	131,879 132,366 132,979 133,635 134,678 134,871 132,182 132,707 133,449 133,279 132,740 132,740	3,712 3,378 3,689 3,304 2,901 3,228 3,421 3,301 3,441 3,387 3,778 5,441	516 359 356 381 349 392 459 375 424 506 558 838	65 56 63 71 64 65 76 69 76 78 75	2.8 2.8 2.5 2.2 2.4 2.5 2.6 2.5 2.6 2.5 2.8	3,867.8 3,551.3 3,774.8 3,560.6 2,989.6 3,143.0 3,467.2 3,199.2 3,494.5 3,432.1 3,623.0 5,660.6	297.86 300.02 299.60 298.80 297.40 293.66 290.97 290.65 294.80 297.24 297.88 302.32
2009: Jan	7,857 7,986 10,177 9,150 9,336 10,240 10,021 10,794 9,852 9,146 10,467 11,238	8,445.8 8,807.0 11,947.7 11,288.2 11,305.2 12,827.4 12,543.3 12,788.3 12,540.7 11,181.6 12,257.5 13,893.4	127,642 127,235 127,156 127,227 127,949 127,834	5,870 6,050 7,557 6,634 6,497 6,833 6,443 5,556 5,072 5,632 5,814	804 644 680 641 567 636 627 500 479 531 548 694	98 98 128 134 150 174 187 193 182 163 163	4.6 4.8 5.9 5.2 5.1 5.3	6,211.3 6,524.8 8,243.2 7,065.9 7,688.3 7,110.6 6,765.3 6,222.1 5,382.8 5,701.8 6,338.6	306.17 308.16 305.93 313.24 315.16 312.75 311.54 308.69 310.93 309.53 306.69 308.41

Includes State Unemployment Insurance (State), Unemployment Compensation for Federal Employees (UCFE), Unemployment Compensation for Ex-service members (UCX), and Federal and State extended benefit programs. Also includes temporary Federal emergency programs: Federal Supplemental Compensation (1982-1985), Emergency Unemployment Compensation (EUC, 1992-1993), Temporary Extended Unemployment Compensation (2002-2004), EUC 2008 (2008-2009), and Federal Additional Compensation (2009).

2 The number of people continuing to receive benefits.

3 Workers covered by regular State Unemployment Insurance programs.

Note: Includes data for the District of Columbia, Puerto Rico, and the Virgin Islands.

Source: Department of Labor (Employment and Training Administration).

<sup>&</sup>lt;sup>4</sup> Individuals receiving final payments in benefit year.

<sup>&</sup>lt;sup>5</sup> For total unemployment only. Excludes partial payments.

Table B-46. Employees on nonagricultural payrolls, by major industry, 1962-2009

[Thousands of persons; monthly data seasonally adjusted]

				Goods-produc	ing industries	ousbriding de	juotouj	Service	e-providing inc	dustries
Year or month	Total		Mining	Con-	ı	Manufacturinç	]		Trade, tran	nsportation, ilities <sup>1</sup>
		Total	and logging	struc- tion	Total	Durable goods	Nondurable goods	Total	Total	Retail trade
1962 1963 1964 1965 1966 1967 1968	55,659 56,764 58,391 60,874 64,020 65,931 68,023 70,512	19,203 19,385 19,733 20,595 21,740 21,882 22,292 22,893	709 694 697 694 690 679 671 683	2,997 3,060 3,148 3,284 3,371 3,305 3,410 3,637	15,498 15,631 15,888 16,617 17,680 17,897 18,211 18,573	9,099 9,226 9,414 9,973 10,803 10,952 11,137 11,396	6,399 6,405 6,474 6,644 6,878 6,945 7,074 7,177	36,455 37,379 38,658 40,279 42,280 44,049 45,731 47,619	11,215 11,367 11,677 12,139 12,611 12,950 13,334 13,853	5,672 5,781 5,977 6,262 6,530 6,711 6,977 7,295
1970	71,006 71,335 73,798 76,912 78,389 77,069 79,502 82,593 86,826 89,932	22,179 21,602 22,299 23,450 23,364 21,318 22,025 22,972 24,156 24,997	677 658 672 693 755 802 832 865 902 1,008	3,654 3,770 3,957 4,167 4,095 3,608 3,662 3,940 4,322 4,562	17,848 17,174 17,669 18,589 18,514 16,909 17,531 18,167 18,932 19,426	10,762 10,229 10,630 11,414 11,432 10,266 10,640 11,132 11,770 12,220	7,086 6,944 7,039 7,176 7,082 6,643 6,891 7,035 7,162 7,206	48,827 49,734 51,499 53,462 55,025 55,751 57,477 59,620 62,670 64,935	14,144 14,318 14,788 15,349 15,696 16,128 16,765 17,658 18,303	7,463 7,657 8,038 8,371 8,536 8,600 8,966 9,359 9,879 10,180
1980	90,528 91,289 89,677 90,280 94,530 97,511 99,474 102,088 105,345 108,014	24,263 24,118 22,550 22,110 23,435 23,585 23,318 23,470 23,909 24,045	1,077 1,180 1,163 997 1,014 974 829 771 770 750	4,454 4,304 4,024 4,065 4,501 4,793 4,937 5,090 5,233 5,309	18,733 18,634 17,363 17,048 17,920 17,552 17,609 17,906 17,985	11,679 11,611 10,610 10,326 11,050 11,034 10,767 10,767 10,969 11,004	7,054 7,023 6,753 6,722 6,870 6,784 6,757 6,842 6,938 6,981	66,265 67,172 67,127 68,171 71,095 73,926 76,156 78,618 81,436 83,969	18,413 18,604 18,457 18,668 19,653 20,379 20,795 21,302 21,974 22,510	10,244 10,364 10,372 10,635 11,223 11,738 12,078 12,419 12,808 13,108
1990 1991 1992 1993 1994 1995 1996 1997 1998	109,487 108,375 108,726 110,844 114,291 117,298 119,708 122,776 125,930 128,993	23,723 22,588 22,095 22,219 22,774 23,156 23,409 23,886 24,354 24,465	765 739 689 666 659 641 637 654 645 598	5,263 4,780 4,608 4,779 5,095 5,274 5,536 5,813 6,149 6,545	17,695 17,068 16,799 16,774 17,020 17,241 17,237 17,419 17,560 17,322	10,737 10,220 9,946 9,901 10,132 10,373 10,486 10,705 10,911 10,831	6,958 6,848 6,853 6,872 6,889 6,868 6,751 6,714 6,649 6,491	85,764 85,787 86,631 88,625 91,517 94,142 96,299 98,890 101,576 104,528	22,666 22,281 22,125 22,378 23,128 23,834 24,239 24,700 25,186 25,771	13,182 12,896 12,828 13,021 13,491 13,897 14,143 14,389 14,609 14,970
2000	131,785 131,826 130,341 129,999 131,435 133,703 136,086 137,598 137,066 131,997	24,649 23,873 22,557 21,816 21,882 22,190 22,531 22,233 21,419 18,938	599 606 583 572 591 628 684 724 774 727	6,787 6,826 6,716 6,735 6,976 7,336 7,691 7,630 7,215 6,234	17,263 16,441 15,259 14,510 14,315 14,226 14,155 13,879 13,431 11,978	10,877 10,336 9,485 8,964 8,925 8,956 8,981 8,808 8,476 7,360	6,386 6,105 5,774 5,546 5,390 5,271 5,174 5,071 4,955 4,618	107,136 107,952 107,784 108,183 109,553 111,513 113,556 115,366 115,646 113,059	26,225 25,983 25,497 25,287 25,533 25,959 26,276 26,630 26,385 25,263	15,280 15,239 15,025 14,917 15,058 15,280 15,353 15,520 15,356 14,774
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec Dec Mar	138,080 137,936 137,814 137,657 137,356 137,228 136,732 136,352 135,755 135,074	21,981 21,887 21,800 21,679 21,612 21,507 21,432 21,351 21,247 21,063 20,814 20,532	748 750 756 756 763 770 777 787 794 794 793 789	7,489 7,445 7,401 7,337 7,293 7,232 7,201 7,177 7,131 7,066 6,939 6,841	13,744 13,692 13,643 13,586 13,555 13,454 13,387 13,322 13,203 13,082 12,902	8,710 8,673 8,637 8,587 8,567 8,533 8,502 8,439 8,390 8,216 8,085	5,034 5,019 5,006 4,999 4,989 4,972 4,952 4,948 4,930 4,866 4,817	116,099 116,049 116,014 115,975 115,905 115,849 115,796 115,702 115,485 115,289 114,941 114,542	26,717 26,655 26,629 26,562 26,503 26,467 26,425 26,354 26,257 26,157 26,005 25,843	15,572 15,526 15,506 15,458 15,420 15,404 15,380 15,335 15,278 15,217 15,126
2009: Jan	134,333 133,652 133,000 132,481 132,178 131,715 131,411 131,257 131,118 130,991 130,995 130,910	20,127 19,832 19,520 19,253 19,041 18,829 18,713 18,583 18,488 18,379 18,321 18,240	781 771 754 740 731 721 715 706 705 700 704 703	6,706 6,593 6,470 6,367 6,310 6,231 6,162 6,093 5,987 5,960 5,907	12,640 12,468 12,296 12,146 12,000 11,877 11,836 11,781 11,769 11,657 11,657	7,881 7,753 7,620 7,490 7,372 7,271 7,248 7,204 7,169 7,134 7,105 7,089	4,759 4,715 4,676 4,656 4,628 4,606 4,588 4,577 4,571 4,552 4,541	114,206 113,820 113,480 113,228 113,137 112,886 112,698 112,674 112,630 112,674 112,670	25,735 25,605 25,479 25,371 25,308 25,258 25,174 25,146 25,090 25,031 24,999 24,962	14,992 14,934 14,872 14,840 14,812 14,792 14,747 14,726 14,686 14,647 14,633 14,623

<sup>&</sup>lt;sup>1</sup> Includes wholesale trade, transportation and warehousing, and utilities, not shown separately.

Note: Data in Tables B-46 and B-47 are based on reports from employing establishments and relate to full- and part-time wage and salary workers in nonagricultural establishments who received pay for any part of the pay period that includes the 12th of the month. Not comparable with labor force data (Tables B-35 through B-44), which include proprietors, self-employed persons, unpaid family workers, and private household workers; which count persons as employed when they are not at work because of industrial disputes, bad weather, etc., even if they are not paid for the time off; which are based on a

See next page for continuation of table.

#### TABLE B-46. Employees on nonagricultural payrolls, by major industry, 1962-2009—Continued

[Thousands of persons; monthly data seasonally adjusted]

				Service	e-providing in	dustries—Cor	ntinued			
Year or month		F	Profes-	Education	Leisure	0.1		Gover	nment	
	Information	Financial activities	sional and business services	and health services	and hospitality	Other services	Total	Federal	State	Local
1962	1,723	2,656	3,885	3,172	3,557	1,243	9,004	2,455	1,669	4,881
1963 1964	1,735 1,766	2,731 2,811	3,990 4,137	3,288 3,438	3,639 3,772	1,288 1,346	9,341 9,711	2,473 2,463	1,747 1,856	5,121 5,392
1964 1965	1,824	2,878	4,306	3,587	3,951	1,404	10,191	2,495	1,996	5,700
1966 1967	1,908 1,955	2,961 3,087	4,517 4,720	3,770 3,986	4,127 4,269	1,475 1,558	10,910 11,525	2,690 2,852	2,141 2,302	6,080 6,371
1968 1969	1,991 2,048	3,234 3,404	4,918 5,156	4,191 4,428	4,453 4,670	1,638 1,731	11,972 12,330	2,871 2,893	2,442 2,533	6,660 6,904
1970	2,041	3,532	5,267	4,577	4,789	1,789	12,687	2,865	2.664	7,158
1971	2,009 2,056	3,651 3,784	5,328	4,675 4,863	4,914 5,121	1,827 1,900	13,012 13,465	2,828 2,815	2,747 2,859	7,437 7,790
1972 1973	2,135	3,920	5,523 5,774	5,092	5,341	1,990	13,862	2,794	2,923	8,146
	2,160 2,061	4,023 4,047	5,974 6,034	5,322 5,497	5,471 5,544	2,078 2 144	14,303 14,820	2,858 2,882	3,039 3,179	8,407 8,758
1975 1976 1977 1978	2,111 2,185	4,155	6,287	5,756	5,794	2,144 2,244 2,359	15,001 15,258	2,863 2,859	3,273 3,377	8,865
1977	2,185	4,348 4,599	6,587 6,972	6,052 6,427	6,065 6,411	2,359	15,258	2,859	3,377	9,023 9,446
13/3	2,375	4,843	7,312	6,767	6,631	2,637	16,068	2,894	3,541	9,633
1980 1981	2,361 2,382	5,025 5,163	7,544 7,782	7,072 7,357	6,721 6,840	2,755 2,865	16,375 16,180	3,000 2,922	3,610   3,640	9,765 9,619
1982	2,317 2,253	5,209	7,848	7,515	6,874	2,924	15,982	2,884	3,640	9,458
1983 1984	2,253 2,398 2,437	5,334 5,553	8,039 8,464	7,766 8,193	7,078 7,489	3,021 3,186	16,011 16,159	2,915 2,943	3,662 3,734	9,434 9,482
1985 1986	2,437 2,445	5,815 6,128	8,871 9,211	8,657 9,061	7,869 8,156	3,366 3,523	16,533 16,838	3,014 3,044	3,832 3,893	9,687 9,901
1987	2,507	6,385	9,608	9,515	8,446	3,699	17.156	3,089	3,967	10,100
1988 1989	2,585 2,622	6,500 6,562	10,090 10,555	10,063 10,616	8,778 9,062	3,907 4,116	17,540 17,927	3,124 3,136	4,076 4,182	10,339 10,609
1990	2,688	6,614	10,848	10,984	9,288	4,261	18,415	3,196	4,305	10,914
1991	2,677 2,641	6,558 6,540	10,714 10,970	11,506 11,891	9,256 9,437	4,249 4,240	18,545 18,787	3,110 3,111	4,355 4,408	11,081 11,267
1992 1993	2,668 2,738	6.709	11.495	12,303 12,807	9,732 10,100	4,350	18.989	3,063	4.488	11.438
1995	2,843	6,867 6,827	12,174 12,844	13,289	10,100	4,428 4,572	19,275 19,432	3,018 2,949	4,576 4,635	11,682 11,849
1996 1997	2,940 3,084	6,969 7,178	13,462 14,335	13,683 14,087	10,777	4,690 4,825	19,539 19,664	2,877	4,606 4,582	12,056
1998	3,218	7,462	15,147	14,446	11,018 11,232	4,976	19,909	2,806 2,772	4,612	12,276 12,525
1999	3,419 3,630	7,648 7,687	15,957 16,666	14,798 15,109	11,543 11,862	5,087 5,168	20,307 20,790	2,769	4,709 4,786	12,829 13,139
2000 2001 2002	3,629	7,808	16.476	15,645	12.036	5,258	21,118 21,513	2,865 2,764 2,766	4,905	13,449 13,718
2002	3,395 3,188	7,847 7,977	15,976 15,987	16,199 16,588	11,986 12,173	5,372 5.401	21,513 21,583	2,766 2,761	5,029 5,002	13,718 13.820
2004	3,118	8,031	16,394	16.953	12,493	5,409	21,621	2,730	4,982	13,909
	3,061 3,038	8,153 8,328	16,954 17,566 17,942	17,372 17,826 18,322	12,816 13,110	5,395 5,438	21,804 21,974 22,218	2,732 2,732 2,734	5,032 5,075	14,041 14,167
2007	3,032 2,997	8,301 8,146	17,942 17,778	18,322 18,855	13,427 13,459	5,494 5,528	22,218 22,500	2,734 2.764	5,122 5,178	14,362 14,557
2009 <i>p</i>	2,856	7,773	16,787	19,272	13,180	5,412	22,516	2,830	5,182	14,504
2008: Jan	3,022 3,025	8,229 8,211	18,069 18,018	18,613	13,534 13,529	5,524 5,533	22,391 22,421	2,737 2,746	5,157 5,153	14,497 14,522
Feb Mar	3,023	8,204	17,954	18,657 18,698	13,528	5,537	22 441	2,751	5,152	14,538
Apr May	3,017 3,013	8,190 8,179	17,950 17,887	18,752 18,798	13,512 13,495	5,541 5.542	22,451 22,488 22,522	2,758 2,763	5,159 5,167	14,534 14,558
June	3,006	8,162	17,824	18,843 18.888	13,490	5,535	22,522	2,763 2,765	5,175	14,582
July Aug	2,995 2,990	8,154 8,141	17,788 17,727	18,950	13,473 13,454	5,536 5,530	22,537 22,556	2,776 2,768	5,184 5,204	14,577 14,584
Sept Oct	2,986	8,115 8.088	17,675 17,612	18,957 18,981	13,428	5,532 5,535	22,535	2,771 2,775	5,192 5,194	14,572 14,570
Nov	2,982 2,965	8,043	17,488	19,044	13,395 13,344	5,509	22,539 22,543	2,775 2,783	5,197	14,563
Dec 2009: Jan	2,940 2,924	8,010 7,954	17,356 17,205	19,080 19,119	13,304	5,477 5.461	22,532 22,540	2,778 2,793	5,196 5,192	14,558 14,555
Feb	2.918	7,898	17,029	19.138	13,268 13,236	5,449	22.547	2.796	5,192	14 559
Mar Apr	2,905 2,884	7,857 7,811	16,910 16,783	19,158 19,175	13,202 13,168	5,426 5,420	22,543 22,616	2,808 2,876	5,186 5,189	14,549 14,551
May	2,858 2,845	7,784	16,756	19,215 19,248	13,195	5,416 5,420	22,605	2,860	5,189 5,174	14,556 14.542
June July	2,834	7,751 7,737	16,655 16,624	19,262	13,176 13,177	5,415	22,533 22,475	2,817 2,826	5,149	14,500
Aug Sept	2,829 2,828	7,714 7,703	16,618 16,642	19,312 19,348	13,163 13,176	5,405 5,395	22,487 22,448	2,825 2,827	5,172 5,173	14,490 14,448
Oct	2,826 2,812	7,697	16,675	19,384	13,134	5,381	22,484	2,844 2,839	5,179	14,461
Oct Nov <sup>p</sup> Dec <sup>p</sup>	2,812 2,806	7,691 7,695	16,764 16,814	19,421 19,456	13,121 13,096	5,378 5,374	22,488 22,467	2,839 2,830	5,180 5,177	14,469 14,460
	,	,	.,	.,	.,	.,	,	,	-,	

Note (cont'd): sample of the working-age population; and which count persons only once—as employed, unemployed, or not in the labor force. In the data

shown here, persons who work at more than one job are counted each time they appear on a payroll.

Establishment data for employment, hours, and earnings are classified based on the 2007 North American Industry Classification System (NAICS). For further description and details see *Employment and Earnings*.

TABLE B-47. Hours and earnings in private nonagricultural industries, 1962-2009 <sup>1</sup> [Monthly data seasonally adjusted]

	Aver	age weekly h	ours	Avera	age hourly ear	nings	Aver	age weekly ea	rnings, total p	rivate
Year or month	Total	Manufa	ecturing	Total <sub>I</sub>	orivate	Manu- facturing	Le	vel	Percent from yea	change ar earlier
	private	Total	Overtime	Current dollars	1982 dollars <sup>2</sup>	(current dollars)	Current dollars	1982 dollars <sup>2</sup>	Current dollars	1982 dollars <sup>2</sup>
1962		40.5	2.8 2.8			\$2.27				
1963 1964	38.5	40.6 40.8	3.1	\$2.53	\$7.86	2.34 2.41	\$97.41	\$302.52		
1965 1966	38.6 38.5	41.2 41.4	3.6 3.9	2.63 2.73	8.04 8.13	2.49 2.60	101.52 105.11	310.46 312.83	4.2 3.5	2.6
1967	37.9	40.6	3.3	2.85	8.21	2.71	108.02	311.30	2.8	5
1968 1969	37.7 37.5	40.7 40.6	3.5 3.6	3.02 3.22	8.37 8.45	2.89 3.07	113.85 120.75	315.37 316.93	5.4 6.1	1.3 .5
1970	37.0	39.8	2.9	3.40	8.46	3.23	125.80	312.94	4.2	-1.3
1971 1972	36.9	39.9 40.6	2.9 3.4	3.63 3.90	8.64 8.99	3.45 3.70	133.58 143.91	318.05 331.59	6.2 7.7	1.6 4.3
1973 1974	36.9	40.7 40.0	3.8 3.2	4.14 4.43	8.98 8.65	3.97 4.31	152.77 161.25 170.28	331.39 314.94	6.2 5.6	1 -5.0
1975	36.0	39.5	2.6 3.1	4.73	8.48	4.71	170.28	305.16	5.6	-5.0 -3.1
1976 1977	35.9	40.1 40.3	3.4	5.06 5.44	8.58 8.66	5.09 5.55	182.67 195.30	309.61 310.99	7.3 6.9	1.5 .4
1978 1979	35.8 35.6	40.4 40.2	3.6 3.3	5.88 6.34	8.69 8.41	6.05 6.57	210.50 225.70	310.93 299.34	7.8 7.2	.0 -3.7
1980	35.2	39.7	2.8	6.85	8.00	7.15	241.12	281.68	6.8	-5.9
1981 1982	35.2 34.7	39.8 38.9	2.8 2.3 2.9	7.44 7.87	7.89 7.87	7.86 8.36	261.89 273.09	277.72 273.09	8.6 4.3	-1.4 -1.7
1983 1984	34.9	40.1 40.7	2.9 3.4	8.20 8.49	7.96 7.96	8.70 9.05	286.18 298.00	277.84 279.55	4.8 4.1	1.7
1985	34.9	40.5	3.3	8.74	7.92	9.40	305.03	276.55	2.4	-1.1
1986 1987	34.7	40.7 40.9	3.4 3.7	8.93 9.14	7.97 7.87	9.59 9.77	309.87 317.16	276.42 273.18	1.6 2.4	.0 -1.2
1988 1989	34.6 34.5	41.0 40.9	3.8 3.8	9.44 9.80	7.82 7.75	10.05 10.35	326.62 338.10	270.60 267.27	3.0 3.5	9 -1.2
1990		40.5	3.9	10.20	7.66	10.33	349.75	262.77	3.4	-1.7
1991 1992	34.1	40.4 40.7	3.8 4.0	10.52 10.77	7.59 7.55	11.13 11.40	358.51 368.25	258.67 258.24	2.5 2.7	-1.6 2
1993	34.3	41.1	4.4	11.05	7.54	11.70	378.91	258.47	2.9	.1
1994 1995	34.3	41.7 41.3	5.0 4.7	11.34 11.65	7.54 7.54	12.04 12.34	391.22 400.07	260.29 258.78	3.2 2.3	.1 .7 6 .4 2.2 2.5 1.0
1996 1997		41.3 41.7	4.8 5.1	12.04 12.51	7.57 7.69	12.75 13.14	413.28 431.86	259.92 265.60	3.3 4.5	.4
1998	34.5	41.4	4.9	13.01	7.89	13.45	448.56	272.18	3.9	2.5
1999		41.4 41.3	4.9 4.7	13.49 14.02	8.01 8.04	13.85 14.32	463.15 481.01	275.03 275.97	3.3 3.9	.3
2001	34.0	40.3	4.0	14.54	8.12	14.76	493.79	275.71	2.7	1 1.3
2002	33.7	40.5 40.4	4.2 4.2	14.97 15.37	8.25 8.28	15.29 15.74	506.75 518.06	279.20 279.13	2.6 2.2	.0
2004 2005	33.7 33.8	40.8 40.7	4.6 4.6	15.69 16.13	8.24 8.18	16.14 16.56	529.09 544.33	277.88 276.17	2.1 2.9	4 6
2006 2007	33.9	41.1 41.2	4.4 4.2	16.76 17.43	8.24 8.33	16.81 17.26	567.87 590.04	279.19 281.97	4.3 3.9	1.1 1.0
2008	33.6	40.8	3.7	18.08	8.30	17.74	607.99	279.14	3.0	-1.0
2009 P 2008: Jan		39.8 41.1	2.9 4.1	18.60 17.77	8.60 8.27	18.21 17.52	616.37 598.85	284.91 278.60	1.4 3.5	2.1 -1.2
Feb	33.8	41.2	4.1	17.83	8.28	17.58	602.65	279.85	3.8	7
Mar Apr	33.8	41.2 41.0	4.0 4.0	17.90 17.94	8.28 8.29	17.64 17.64	605.02 606.37	279.82 280.03	3.6 3.8	7 7 4 -1.1 -2.5 -2.9 -2.2 -2.3
May June		40.9 40.9	3.9 3.8	17.99 18.04	8.27 8.20	17.68 17.73	606.26 606.14	278.56 275.59	3.1 2.6	-1.1 -2.5
July	33.6	41.0	3.7	18.10	8.16	17.80	606.14 608.16	274.31	2.9	-2.9
Aug Sept	33.6	40.8 40.5	3.7 3.5	18.18 18.21	8.20 8.21	17.78 17.81	612.67 611.86	276.47 275.99	3.5 3.0	-2.2 -2.3
Oct Nov	33.5	40.4 40.2	3.5 3.2	18.28 18.34	8.33 8.54	17.89 17.94	612.38 612.56	279.11 285.23	2.9 2.6	9 2.0
Dec	33.3	39.9	2.9	18.40	8.65	17.96	612.72	288.12	2.4	3.1
2009: Jan Feb	33.3 33.3	39.8 39.5	2.9 2.7	18.43 18.46	8.64 8.61	17.99 18.07	613.72 614.72	287.60 286.80	2.5 2.0	3.2 2.5
Mar	33.1	39.4 39.6	2.7 2.6	18.46 18.50 18.50	8.64 8.65	18.10	612.35	286.10	1.2	2.5 2.2 2.2 2.8 2.7
Apr May	33.1	39.4	2.7 2.8 2.8	18.53	8.65	18.11 18.11	612.35 613.34	286.16 286.25	1.0 1.2	2.2
June July	33.1	39.5 39.9	2.8 2.9	18.54 18.59	8.57 8.59	18.13 18.27	611.82 615.33	282.94 284.48	.9 1.2	2.7 3.7
Aug Sept	33.1	39.9 40.0	2.9 3.0 3.0	18.66 18.68	8.58 8.57	18.27 18.36	617.65 618.31	283.98 283.77	.8 1.1	3.7 2.7 2.8
Oct	33.0	40.1	3.2 3.4	18.74	8.57	18.35	618.42	282.88	1.0	1.4
Nov P	33.2 33.2	40.4 40.4	3.4 3.4	18.77 18.80	8.54 8.54	18.41 18.40	623.16 624.16	283.59 283.58	1.7 1.9	6 -1.6

Note: See Note, Table B-46.

For production or nonsupervisory workers; total includes private industry groups shown in Table B–46.
 Current dollars divided by the consumer price index for urban wage earners and clerical workers on a 1982=100 base.

Table B-48. Employment cost index, private industry, 1995-2009

		Total private	,	Go	ods-produc	ina	Sor	vice-providi	ng 1		Manufacturi	na
Year and month			,			ling .			ily .			ig .
	Total compen- sation	Wages and salaries	Benefits <sup>2</sup>	Total compen- sation	Wages and salaries	Benefits <sup>2</sup>	Total compen- sation	Wages and salaries	Benefits <sup>2</sup>	Total compen- sation	Wages and salaries	Benefits <sup>2</sup>
				Indexes or	n SIC basis,	December 2	2005=100; n	ot seasonal	ly adjusted			
December: 1995	70.2	72.2	65.7	70.7	73.7	65.2	70.0	71.7	66.0	70.8	73.9	65.0
1996 1997	72.4 74.9	74.7 77.6	67.0 68.5	72.7 74.5	76.0 78.3	66.4 67.3	72.3 75.1	74.2 77.4	67.3 69.2	72.9 74.6	76.3 78.6	66.5
1998	77.5	80.6	70.2	76.5	81.1	68.1	78.0	80.5	/1.4	76.6	81.3	67.4 67.9
1999 2000	80.2 83.6	83.5 86.7	72.6 76.7	79.1 82.6	83.8 87.1	70.5 74.3	80.6 84.2	83.4 86.6	73.8 78.1	79.2 82.3	84.1 87.1	70.3 73.6
2001	87.1	90.0	80.6	85.7	90.2	77.3	87.8	89.9	82.5	85.3	90.2	76.3
				Indexes on								
2001 <sup>3</sup> 2002	87.3 90.0	89.9 92.2	81.3 84.7	86.0 89.0	90.0 92.6	78.5 82.3	87.8 90.4	89.8 92.1	82.4 85.8	85.5 88.7	90.2 92.8	77.2 81.3
2003 2004	93.6 97.2	95.1 97.6	90.2 96.2	92.6 96.9	94.9 97.2	88.2 96.3	94.0 97.3	95.2 97.7	91.0 96.1	92.4 96.9	95.1 97.4	81.3 87.3 96.0
2005 2006	100.0 103.2	100.0 103.2	100.0 103.1	100.0 102.5	100.0 102.9	100.0 101.7	100.0 103.4	100.0 103.3	100.0 103.7	100.0 101.8	100.0 102.3	100.0
2007	106.3 108.9	106.6 109.4	105.6	105.0	106.0 109.0	103.2 104.7	106.7 109.4	106.8	106.6 108.9	103.8	104.9 107.7	100.8 101.7
2008	110.9	110.9	107.7 108.8	107.5 108.6	110.0	105.8	110.8	109.6 111.1	100.9	105.9 107.0	107.7	102.5 103.6
2009: Mar June	109.3 109.6	109.8 110.1	108.2 108.4	107.9 108.2	109.2 109.5	105.4 105.7	109.8 110.1	110.0 110.3	109.3 109.5	106.5 106.7	108.1 108.4	103.5 103.6
Sept Dec	110.0 110.2	110.6 110.9	108.7 108.8	108.4 108.6	109.8 110.0	105.7 105.8	110.5 110.8	110.8 111.1	109.9 109.9	106.8 107.0	108.6 108.9	103.6 103.4 103.6
DGC	110.2	110.3	100.0			sis, Decemb				107.0	100.3	103.0
2008: Mar	107.2 107.9	107.6	106.5	106.1	107.1	104.0	107.6	107.7	107.4	104.6	105.9	102.3 102.2
June Sept	107.9 108.6	108.4 109.1	106.9 107.5	106.6 107.2	107.8 108.5	104.3 104.5	108.4 109.1	108.5 109.2	108.0 108.7	105.1 105.6	106.6 107.3	102.2 102.4
Dec 2009: Mar	109.1 109.3	109.6 109.8	107.9 108.1	107.7 108.0	109.2 109.3	104.9 105.4	109.6 109.8	109.7 110.0	109.1 109.2	106.0 106.4	107.9 108.1	102.6 103.4
June Sept	109.5 110.0	110.0 110.5	108.3	108.1 108.3	109.4 109.8	105.6 105.6	110.0 110.5	110.2	109.3 109.8	106.6 106.8	108.3	103.6 103.4
Dec	110.4	111.0	109.0	108.8	110.3	106.0	111.0	111.3	110.2	107.2	109.1	103.7
				Percent	change fror	n 12 months	earlier, not	seasonally	adjusted			
December: SIC:												
1995 1996	2.5 3.1	2.8 3.5	2.2 2.0	2.5 2.8	2.8 3.1	1.7 1.8	2.8 3.3	3.0 3.5	2.5 2.0	2.6 3.0	2.9 3.2	1.7 2.3
1997 1998	3.1 3.5 3.5	3.9 3.9	2.0 2.2 2.5	2.8 2.5 2.7	3.1 3.0 3.6	1.4	3.9 3.9	4.3 4.0	2.0 2.8 3.2	3.0 2.3 2.7	3.2 3.0 3.4	1.4
1999	3.5	3.6	3.4	3.4	3.3	3.5	3.3	3.6	3.4	3.4	3.4	3.5
2000 2001	4.2 4.2	3.8 3.8	5.6 5.1	4.4 3.8	3.9 3.6	5.4 4.0	4.5 4.3	3.8 3.8	5.8 5.6	3.9 3.6	3.6 3.6	4.7 3.7
NAICS: 2001 <sup>3</sup>	4.1	3.8	5.2	3.6	3.6	3.7	4.4	3.8	5.6	3.4	3.6	
2002 2003	3.1 4.0	2.6 3.1	4.2 6.5	3.5 4.0	2.9	4.8 7.2	3.0 4.0	2.6 3.4	4.1 6.1	3.7 4.2	2.9 2.5	3.5 5.3 7.4
2004	3.8 2.9	2.6 2.5 3.2	6.7 4.0	4.6 3.2	2.5 2.4 2.9	9.2 3.8	3.5 2.8	2.6 2.4	5.6 4.1	4.9 3.2	2.4 2.7	10.0
2005	3.2	3.2	3.1	2.5	2.9	1.7	3.4	3.3	3.7	1.8	2.3	10.0 4.2 .8 .9
2007	3.0 2.4	3.3 2.6	2.4 2.0	2.4 2.4	3.0 2.8	1.5 1.5	3.2 2.5	3.4 2.6	2.8 2.2	2.0 2.0	2.5 2.7	.9
2009 2009: Mar	1.2 1.9	1.4 2.0	1.0 1.6	1.0 1.7	.9 2.0	1.1	1.3 1.9	1.4	.9 1.6	1.0 1.7	1.1	1.1 1.2
June	1.5 1.2	1.6 1.4	1.3 1.1	1.3 1.1	1.4 1.1	1.2	1.5 1.3	1.6 1.4	1.3 1.1	1.5 1.1	1.6 1.1	1.4
Sept Dec	1.2	1.4	1.0	1.0	.9	1.1	1.3	1.4	.9	1.0	1.1	1.1
				Perce	nt change f	rom 3 month	ns earlier, se	easonally ac				
2008: Mar June	0.7 .7	0.8 .7	0.6 .4	0.9 .5	0.8 .7	0.6 .3 .2	0.7 .7	0.7 .7	0.5 .6	0.7 .5	0.8 .7	0.6 1
Sept Dec			.6	.6 .5 .3	.6 .6 .1	.2			.6 ا	.5	.7	.2
2009: Mar	.6 .5 .2 .2 .5	.2	.4 .2 .2 .3	.3	.1	.4 .5 .2	.6 .5 .2 .2	.3	.4 .1	.5 .5 .4 .4 .2 .2	.2	.2 .2 .8 .2 2
June Sept		.6 .5 .2 .5 .5	.3	.1 .2 .5	.1 .4	.0	.5	.6 .5 .3 .2 .5	.1 .5	.2	.6 .2 .2 .3 .5	2
Dec	.4	.5	.4	.5	.5	.4	.5	.5	.4	.4	.5	.3

<sup>&</sup>lt;sup>1</sup> On Standard Industrial Classification (SIC) basis, data are for service-producing industries.

Employer costs for employee benefits.
 Data on North American Industry Classification System (NAICS) basis available beginning with 2001; not strictly comparable with earlier data shown on

Note: Changes effective with the release of March 2006 data (in April 2006) include changing industry classification to NAICS from SIC and rebasing data to December 2005–100. Historical SIC data are available through December 2005.

Data exclude farm and household workers.

Table B-49. Productivity and related data, business and nonfarm business sectors, 1960-2009

[Index numbers, 1992=100; quarterly data seasonally adjusted]

Year or quarter		per hour persons	Out	put <sup>1</sup>		s of all sons <sup>2</sup>	Compe per	ensation hour <sup>3</sup>	compe	eal ensation hour <sup>4</sup>		t labor osts	Impli def	cit price lator <sup>5</sup>
real of quarter	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector	Busi- ness sector	Nonfarm business sector
1960	49.1 50.8 53.1 55.2 57.0 59.1 61.5 62.8 65.0 65.3	52.1 53.7 56.2 58.1 59.8 61.7 63.9 65.0 67.2 67.3	32.2 32.8 34.9 36.5 38.9 41.6 44.4 45.3 47.5 49.0	31.9 32.5 34.8 36.4 38.8 41.6 44.6 45.3 47.7 49.2	65.6 64.6 65.8 66.2 68.1 70.4 72.3 72.1 73.2 75.0	61.2 60.6 61.9 62.6 64.9 67.4 69.8 69.7 71.0	13.9 14.5 15.1 15.6 16.2 16.8 18.0 19.0 20.5 22.0	14.5 15.0 15.6 16.1 16.6 17.2 18.2 19.3 20.8 22.2	61.4 63.2 65.3 66.8 68.4 69.8 72.4 74.3 77.0 78.1	64.0 65.5 67.4 68.8 70.0 71.2 73.3 75.3 77.9 78.9	28.4 28.5 28.4 28.3 28.5 29.2 30.2 31.6 33.6	27.8 27.9 27.7 27.7 27.8 27.8 28.5 29.6 30.9 32.9	27.0 27.2 27.5 27.7 28.0 28.4 29.1 29.9 31.1 32.5	26.5 26.7 27.0 27.2 27.5 27.9 28.5 29.4 30.6 32.0
1970	66.6 69.3 71.6 73.7 72.5 75.1 77.5 78.8 79.6 79.6	68.3 71.1 73.4 75.7 74.5 76.6 79.1 80.4 81.4	49.0 50.8 54.1 57.9 57.0 56.5 60.2 63.6 67.6 69.8	49.1 51.0 54.4 58.3 57.5 56.6 60.5 63.9 68.1 70.2	73.5 73.3 75.6 78.5 78.7 75.3 77.8 80.7 84.9 87.7	71.9 71.7 74.0 77.0 77.2 73.9 76.5 79.5 83.7 86.6	23.6 25.1 26.7 29.0 31.8 35.0 38.0 41.1 44.6 48.9	23.8 25.3 26.9 29.1 31.9 35.2 38.1 41.2 44.9 49.1	79.6 81.0 83.5 85.2 84.1 85.0 87.3 88.5 89.9	80.0 81.5 84.1 85.6 84.6 85.4 87.5 88.9 90.4 90.2	35.5 36.2 37.3 39.3 43.8 46.6 49.1 52.1 56.0 61.4	34.8 35.6 36.7 38.4 42.9 45.9 48.2 51.3 55.1 60.5	33.9 35.4 36.6 38.5 42.3 46.4 48.8 51.8 55.4 60.1	33.4 34.8 35.9 37.2 41.0 45.4 47.9 51.0 54.4 59.0
1980 1981 1982 1983 1984 1985 1986 1987 1988	79.4 81.1 80.4 83.3 85.5 87.5 90.0 90.3 91.6 92.6	80.9 82.0 81.1 84.7 86.4 87.8 90.5 90.8 92.3 93.0	69.1 71.0 68.8 72.5 78.8 82.5 85.6 88.4 92.2 95.6	69.5 71.0 68.7 73.1 79.1 82.5 85.7 88.6 92.6 95.9	87.0 87.6 85.6 87.1 92.2 94.3 95.1 97.9 100.6 103.3	85.9 86.6 84.7 86.3 91.6 94.0 94.7 97.6 100.4 103.1	54.1 59.2 63.5 66.1 68.9 72.1 75.8 78.6 82.7 84.9	54.3 59.6 63.8 66.5 69.2 72.3 76.1 78.8 82.8 84.9	89.5 90.5 90.3 90.5 91.6 94.5 94.8 96.2 94.7	89.9 90.0 90.9 90.9 91.8 94.9 95.1 96.3 94.7	68.1 73.1 79.0 79.4 80.6 82.5 84.3 87.1 90.3 91.7	67.2 72.7 78.7 78.5 80.1 82.3 84.1 86.8 89.7 91.3	65.6 71.6 75.7 78.3 80.5 82.4 83.8 85.8 88.5 91.8	64.7 70.9 75.3 77.7 79.9 82.2 83.6 85.6 88.2 91.4
1990	94.5 96.0 100.0 100.5 101.4 101.5 104.4 106.3 109.4 113.3	94.7 96.2 100.0 100.6 101.6 102.0 104.6 106.2 109.4 113.0	97.1 96.2 100.0 103.2 108.3 111.3 116.4 122.4 128.6 135.7	97.3 96.4 100.0 103.5 108.3 111.8 116.7 122.6 128.9 136.1	102.7 100.2 100.0 102.7 106.8 109.7 111.5 115.2 117.5 119.8	102.7 100.2 100.0 102.9 106.6 109.6 111.5 115.4 117.9 120.5	90.3 95.0 100.0 102.2 103.8 105.9 109.5 113.1 120.0 125.4	90.2 94.9 100.0 102.0 103.8 106.0 109.5 112.9 119.7 124.8	96.0 97.4 100.0 99.8 99.2 98.8 99.5 100.6 105.3 107.8	95.8 97.3 100.0 99.6 99.2 98.9 99.5 100.4 105.0 107.3	95.6 98.9 100.0 101.7 102.3 104.4 104.9 106.4 109.6 110.7	95.2 98.7 100.0 101.4 102.2 103.9 104.6 106.3 109.4 110.5	95.0 98.1 100.0 102.0 103.7 105.6 107.3 109.0 109.7 110.6	94.7 98.1 100.0 102.0 103.8 105.7 107.1 109.1 111.0
2000	117.2 120.7 126.2 131.0 134.9 137.1 138.5 141.0 143.6	116.8 120.2 125.7 130.3 134.0 136.2 137.5 140.1 142.6	141.9 143.0 145.8 150.3 156.5 161.8 166.8 170.5	142.2 143.4 146.2 150.6 156.8 162.0 167.1 171.0 170.7	121.0 118.4 115.6 114.7 116.1 118.0 120.4 120.9 118.7	121.7 119.3 116.3 115.5 117.0 118.9 121.5 122.1 119.7	134.6 140.9 145.3 152.3 157.6 163.8 170.1 177.3 182.1	134.1 140.1 144.5 151.4 156.6 162.8 169.0 176.0 181.0	111.9 114.0 115.6 118.6 119.5 120.2 120.8 122.4 121.1	111.5 113.3 115.0 117.9 118.7 119.4 120.0 121.6 120.4	114.8 116.7 115.1 116.2 116.9 119.5 122.8 125.7 126.8	114.8 116.5 115.0 116.2 116.8 119.5 122.9 125.7 126.9	112.6 114.6 115.5 117.1 120.2 124.1 127.7 131.0 133.0	113.2 115.1 116.1 117.6 120.4 124.7 128.5 131.5 133.5
2006: I II III IV	138.5 138.7 138.0 138.7	137.5 137.7 137.0 137.8	166.0 166.6 166.4 168.1	166.4 166.8 166.7 168.4	119.8 120.1 120.6 121.2	121.0 121.1 121.7 122.2	168.4 169.1 169.7 173.3	167.1 168.0 168.6 172.3	120.8 120.3 119.7 122.5	119.9 119.6 118.9 121.8	121.6 121.9 123.0 124.9	121.5 122.0 123.0 125.0	126.4 127.4 128.3 128.7	127.1 128.3 129.1 129.3
2007: I II III IV	139.0 140.2 142.1 142.6	138.2 139.2 141.1 141.8	168.4 169.8 171.4 172.3	168.8 170.3 172.0 172.8	121.2 121.2 120.6 120.8	122.1 122.4 121.9 121.9	175.2 176.5 177.8 179.6	174.2 175.1 176.3 178.5	122.7 122.4 122.6 122.1	122.1 121.4 121.5 121.3	126.0 125.9 125.1 125.9	126.0 125.8 125.0 125.9	130.0 130.9 131.4 131.9	130.5 131.4 131.7 132.2
2008: I II IV	142.7 143.8 143.9 144.2	141.7 142.8 142.8 143.1	171.7 172.2 170.6 167.4	172.0 172.6 170.8 167.5	120.3 119.8 118.6 116.1	121.4 120.8 119.6 117.0	180.3 181.0 183.0 184.2	179.2 179.8 181.8 183.1	121.2 120.4 119.9 123.3	120.5 119.6 119.1 122.6	126.3 125.9 127.2 127.7	126.4 125.9 127.3 128.0	132.1 132.5 134.0 133.6	132.3 132.9 134.4 134.3
2009: I II III	144.3 146.7 149.7	143.2 145.6 148.5	163.6 163.2 164.5	163.7 163.2 164.4	113.4 111.3 109.9	114.3 112.1 110.7	182.0 184.9 187.6	180.9 183.9 186.4	122.6 124.1 124.8	121.9 123.5 124.0	126.1 126.1 125.3	126.3 126.3 125.5	134.3 134.2 134.3	135.2 135.1 135.3

<sup>1</sup> Output refers to real gross domestic product in the sector.
2 Hours at work of all persons engaged in sector, including hours of proprietors and unpaid family workers. Estimates based primarily on establishment data.

<sup>&</sup>lt;sup>2</sup> Hours at work of all persons engaged in sector, including rious or proprieties and unpaid ratingly workers. Estimates based primarily on establishment data.
<sup>3</sup> Wages and salaries of employees plus employers Contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.
<sup>4</sup> Hourly compensation divided by the consumer price index for all urban consumers for recent quarters. The trend from 1978–2008 is based on the consumer price index research series (CPI-U-RS).
<sup>5</sup> Current dollar output divided by the output index.

TABLE B-50. Changes in productivity and related data, business and nonfarm business sectors, 1960-2009

[Percent change from preceding period; quarterly data at seasonally adjusted annual rates]

	Output	per hour		tput 1	Hour	s of all	Compe	ensation		eal ensation		labor	Impli	cit price
Year or quarter	Busi-	Nonfarm	Busi-	Nonfarm	Busi-	Nonfarm	Busi-	Nonfarm	per Busi-	Nonfarm	Busi-	Nonfarm	Busi-	Nonfarm
	ness sector	business sector	ness sector	business sector	ness sector	business sector	ness sector	business sector	ness sector	business sector	ness sector	business sector	ness sector	business sector
1960 1961	1.7 3.5	1.2 3.1	1.9 1.9	1.8 2.0	0.2 -1.5	0.6 -1.1	4.2 3.9	4.3 3.3	2.4 2.8	2.5 2.3	2.4 .4	3.1 .2	1.1 .8	1.1 .8
1962 1963	4.6 3.9	4.5 3.5	6.5 4.6	6.8 4.7	1.8 .7	2.2 1.1	4.4 3.6	4.0 3.4	3.4 2.2	3.0 2.1	1 3	5 1	1.0	1.0 .7
1964 1965 1966	3.4 3.5 4.1	2.9 3.1	6.3 7.1 6.8	6.7 7.1	2.9 3.4 2.6	3.7 3.9 3.5	3.8 3.7	3.1 3.3 5.9	2.4	1.8 1.7	.4 .2 2.6	.2 .2 2.3	1.1	1.3 1.3 2.3
1966 1967 1968	2.2	3.6 1.7 3.4	1.9 5.0	7.1 1.7 5.2	3 1.5	.0 1.8	6.7 5.7 8.1	5.8 5.8 7.8	3.8 2.5 3.7	3.0 2.7 3.5	3.4 4.5	4.0 4.3	2.5 2.7 4.0	3.2 3.9
1969 1970	.5	1.5	3.1	3.0 1	2.5 -2.0	2.9 -1.6	7.0 7.7	6.8	1.4	1.3	6.5 5.6	6.6 5.6	4.6 4.3	4.5 4.4
1971 1972	4.1	4.0	3.8 6.4	3.8 6.6	3 3.1	2 3.2	6.3 6.3	6.4 6.5	1.8	1.9	2.1 3.0	2.3 3.1	4.2 3.6	4.3 3.2
1973 1974	3.1 -1.7	3.1 -1.6	7.0 -1.5	7.3 -1.5	3.8	4.1	8.4 9.6	8.1 9.8	2.1 -1.3	1.8 -1.2	5.2 11.5	4.9 11.6	5.2 9.7	3.5 10.3
1975 1976 1977	3.5 3.2 1.7	2.8 3.3 1.6	9 6.6 5.6	-1.6 7.0 5.6	-4.3 3.3 3.8	-4.3 3.6 3.9	10.2 8.6 8.0	10.1 8.4 8.1	1.0 2.7 1.4	.9 2.5 1.5	6.5 5.3 6.2	7.1 4.9 6.5	9.7 5.3 6.0	10.7 5.5 6.3
1978 1979	1.1	1.3 4	6.3 3.3	6.6 3.2	5.1 3.4	5.2 3.6	8.7 9.6	8.8 9.4	1.5	1.7 1	7.5 9.6	7.4 9.9	7.1 8.5	6.7 8.5
1980 1981	3 2.1	3 1.4	-1.1 2.8	-1.1 2.1	9 .7	8 .7	10.7 9.5	10.7 9.7	4 .0	4 .1	10.9 7.3	11.0 8.1	9.0 9.2	9.6 9.6
1982 1983	8 3.6	-1.1 4.4	-3.0 5.4	-3.2 6.4	-2.3 1.8	-2.2 1.9	7.2 4.1	7.1 4.2	1.1 1	1.0 1	8.1 .5	8.3 2	5.7 3.4	6.2 3.2 2.9
1984 1985 1986	2.7 2.3 2.9	2.0 1.6 3.1	8.7 4.6 3.7	8.2 4.3 3.9	5.8 2.3 .8	6.1 2.6 .8	4.2 4.7 5.1	4.1 4.4 5.2	1.2 3.3	.0 1.0 3.4	1.5 2.4 2.2	2.0 2.8 2.1	2.9 2.4 1.6	2.9 2.9 1.7
1987 1988	.3 1.5	.3 1.6	3.3 4.3	3.3 4.6	3.0 2.7	3.0 2.9	3.6 5.2	3.6 5.0	.2 1.5	.2 1.3	3.3 3.7	3.3 3.3	2.4 3.2	2.4 3.0
1989 1990	1.0	.8 1.8	3.7 1.5	3.5 1.4	2.6 6	2.7 4	2.7 6.4	2.6 6.2	-1.6 1.4	-1.7 1.1	1.6 4.2	1.8 4.3	3.7 3.6	3.6 3.7
1991 1992	1.5 4.2	1.5 4.0	9 3.9	9 3.8	-2.4 2	-2.4 2	5.1 5.3	5.3 5.4	1.5 2.7	1.6 2.8	3.5 1.1	3.7 1.3	3.3 1.9	3.5 2.0
1993 1994 1995	.5 .9 .0	.6 1.0 .4	3.2 4.9 2.8	3.5 4.7 3.2	2.7 4.0 2.8	2.9 3.6 2.8	2.2 1.5 2.1	2.0 1.8 2.1	2 6 3	5 3 3	1.7 .6 2.0	1.4 .8 1.7	2.0 1.7 1.8	2.0 1.8 1.8
1996 1997	2.9 1.8	2.6 1.5	4.6 5.2	4.4 5.1	1.6 3.4	1.8 3.5	3.4 3.2	3.3 3.1	.7 1.1	.6 .9	.5 1.5	.7 1.6	1.6 1.6	1.4 1.9
1998 1999	3.0 3.5	2.9 3.3	5.0 5.6	5.1 5.6	2.0 2.0	2.1 2.2	6.1 4.5	6.0 4.3	4.6 2.4	4.5 2.2	3.0 .9	3.0 .9	.7 .8	.8 1.0
2000	3.5 3.0	3.4 2.9	4.5 .8	4.4 .9	1.0 -2.1	1.0 -2.0	7.4 4.7	7.4 4.5	3.9 1.8	4.0 1.6	3.7 1.7	3.9 1.5	1.8 1.8	1.9 1.7
2002 2003 2004	4.5 3.8 2.9	4.6 3.7 2.8	2.0 3.1 4.2	1.9 3.0 4.1	-2.4 7 1.2	-2.5 6 1.3	3.1 4.8 3.5	3.2 4.8 3.4	1.5 2.5 .8	1.5 2.5 .7	-1.3 .9 .6	-1.3 1.1 .5	.8 1.4 2.6	.9 1.3 2.4
2005	1.7	1.7 .9	3.4 3.1	3.4 3.1	1.6	1.7	4.0 3.8	4.0 3.8	.6 .5	.6 .5	2.2 2.8	2.3 2.8	3.2 2.9	3.5 3.0 2.3
2007 2008	1.8 1.9	1.8 1.8	2.2 .0	2.3 1	.4 –1.9	.5 –1.9	4.2 2.7	4.2 2.8	1.3 -1.1	1.3 -1.0	2.4 .8	2.3 1.0	2.6 1.5	1.5
2006:	2.8 .6 -2.2	2.8	6.5 1.4	6.8 1.0	3.6	3.9 .4	5.8 1.6	5.5 2.1	3.7 -1.6 -2.3	3.5 -1.1 -2.3	2.9 1.0	2.6 1.5	2.0 3.2	2.2 3.6
III	2.1	-1.9 2.4	4 4.0	1 4.2	1.9 1.9	1.9 1.8	1.4 8.8	1.4 9.1	9.9	10.2	3.8 6.5	3.4 6.5	2.9	2.6
2007:   	.9 3.5 5.5	1.2 2.8 5.5	.8 3.5 3.7	.9 3.7 3.9	1 .0 -1.7	3 .9 -1.5	4.4 3.1 3.0	4.7 2.0 2.7	.6 -1.1 .6	.8 -2.1 .3	3.5 4 -2.4	3.5 7 -2.7	4.0 2.8 1.4	3.6 2.7 1.1
III IV 2008: I	1.6	2.0 1	2.1 -1.3	1.8 -1.7	-1.7 .5 -1.5	-1.5 2 -1.6	4.3 1.5	5.0 1.7	-1.4 -3.0	7 -2.8	2.6 1.3	3.0 1.7	1.6	1.4
     	3.1	3.1 1	1.1	1.3 -4.0	-1.5 -1.9 -4.0	-1.7 -3.9	1.6 4.5	1.3 4.5	-2.8 -1.6	-2.6 -3.0 -1.6	-1.5 4.2	-1.8 4.6	1.4 4.3	1.6 4.6
IV 2009: I	.8	.8	-3.7 -7.2 -8.7	-7.6 -8.8	-8.0 -8.9	-8.3 -9.0	2.6 -4.7	2.9 -4.7	12.0 -2.4	12.3 -2.4	1.8 -4.9	2.0 -5.0	-1.0 2.1	2 2.7
 	6.8 8.5	6.9 8.1	-1.0 3.1	-1.1 2.9	-7.4 -5.0	-7.5 -4.8	6.7 5.8	6.9 5.4	5.3 2.1	5.5 1.8	2 -2.4	.0 -2.5	3 .2	3 .5

Note: Percent changes are based on original data and may differ slightly from percent changes based on indexes in Table B-49.

Output refers to real gross domestic product in the sector.
 Hours at work of all persons engaged in the sector. See footnote 2, Table B–49.
 Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.
 Hourly compensation divided by a consumer price index. See footnote 4, Table B–49.
 Current dollar output divided by the output index.

#### PRODUCTION AND BUSINESS ACTIVITY

Table B-51. Industrial production indexes, major industry divisions, 1962-2009

[2002=100; monthly data seasonally adjusted]

	Total		Manufa	acturing			
Year or month	industrial production <sup>1</sup>	Total <sup>1</sup>	Durable	Nondurable	Other (non-NAICS) <sup>1</sup>	Mining	Utilities
1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1978 1978 1980 1981 1980 1982 1983 1984 1988 1988 1988 1988 1989 1990 1990 1991 1992 1999 1999 1999 199	284 30.1 35.3 38.4 39.2 41.4 43.3 41.9 42.5 46.6 50.4 45.8 49.4 50.2 45.8 49.4 50.1 56.0 57.0 56.1 56.6 60.5 61.3 61.9 69.1 69.7 70.6 70.8 80.4 80.1 90.1 90.1 90.1 90.1 90.1 90.1 90.1 9	25.8 27.4 29.3 32.4 36.1 38.1 38.0 38.6 42.6 46.3 41.5 45.2 49.1 52.1 51.8 52.9 51.9 57.9 57.9 57.9 57.9 57.9 57.9 57.9 57	31.4 35.3 35.1 30.5 33.4 36.6 39.5 41.5 39.7 40.1 36.7 38.5 52.6 52.8 51.2 52.8 54.8 54.8 54.8 54.8 54.8 54.8 54.8 54	60.9 63.8 64.1 59.4 64.9 69.3 71.8 72.2 70.0 69.6 72.8 83.0 85.8 88.3 87.7 87.4 89.6 90.9 94.0 95.7 95.0 101.0 101.7	68.3 70.5 71.0 67.5 69.6 76.3 78.9 80.6 83.4 85.4 86.4 88.8 96.5 98.4 104.1 100.9 96.8 94.8 95.5 94.7 94.7 94.7 94.7 94.7 94.7 107.8 112.6 105.7 100.0 97.1	107.8 108.8 108.8 104.2 105.0 107.4 110.8 114.1 116.2 119.2 119.2 113.3 107.3 114.3 112.0 103.9 104.8 107.5 106.4 105.4 105.4 105.3 107.1 108.9 107.2 107.8 108.9 107.1 108.9 109.0	50.3 53.2 53.0 54.0 56.4 58.7 60.2 61.6 62.0 62.9 60.9 61.4 65.0 66.4 77.9 79.8 79.7 82.6 84.2 87.2 89.7 92.0 94.7 97.0 94.7
2005 2006 2007 2008 2009 P	107.2 109.7 111.3 108.8 98.2	108.5 111.2 112.7 109.1 96.7	112.8 117.8 120.2 116.3 96.7	104.8 105.7 106.7 103.6 98.0	97.6 96.6 95.3 89.9 75.5	98.3 101.5 102.1 104.2 97.9	105.4 104.8 108.3 108.6 106.6
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec Dec Dec Mar Apr May June July Aug Sept Oct Nov Dec Dec Market Ma	112.3 112.0 111.6 111.0 110.7 110.4 110.4 109.2 104.8 106.2	113.4 112.8 112.7 111.7 111.5 111.0 110.8 109.7 105.7 106.0 103.6	121.9 121.2 121.0 119.3 118.9 119.0 117.2 113.7 110.8 108.2	106.6 106.2 106.1 105.8 105.9 104.9 104.1 99.3 102.7 100.3	93.9 93.5 93.6 91.8 90.8 89.3 88.9 88.1 86.9 86.4	104.2 105.0 104.7 104.9 104.9 106.9 106.4 96.4 103.5 105.4	110.9 111.4 108.8 109.7 108.2 109.4 107.9 104.3 105.7 107.1 109.1
2009: Jan Feb	100.1 99.3 97.7 97.2 96.2 95.8 96.9 98.3 98.9 99.1 99.7	97.8 97.7 96.1 95.7 94.8 94.4 95.9 97.3 98.0 97.8 98.7	99.9 98.7 96.4 95.7 93.7 96.3 97.5 98.5 98.1 98.8	96.7 97.7 96.9 97.0 97.1 97.2 97.1 98.6 99.0 100.3 100.2	81.4 80.4 76.1 75.1 74.4 73.6 74.5 75.0 73.5 74.7	102.8 101.3 98.7 96.1 95.1 93.7 95.1 97.0 96.8 96.8 98.6	111.5 106.4 106.1 106.4 104.3 103.8 102.8 103.4 104.1 106.8 104.2

<sup>&</sup>lt;sup>1</sup> Total industry and total manufacturing series include manufacturing as defined in the North American Industry Classification System (NAICS) plus those industries—logging and newspaper, periodical, book, and directory publishing—that have traditionally been considered to be manufacturing and included in the industrial sector.

Note: Data based on NAICS; see footnote 1.

Table B-52. Industrial production indexes, market groupings, 1962-2009

[2002=100; monthly data seasonally adjusted]

					Final p		uata sea	acondiny	aujustot		dustrial su	upplies		Materials	3
Voor or month	Total indus- trial			Consume	er goods		E	quipmen	t						
Year or month	pro- duc- tion	Total	Total	Auto- motive prod- ucts	Other dur- able goods	Non- dur- able goods	Total <sup>1</sup>	Busi- ness	De- fense and space	Total	Con- struc- tion	Busi- ness	Total	Non- energy	Energy
1962 1963 1964 1965 1966 1967 1967 1968	28.4 30.1 32.1 35.3 38.4 39.2 41.4 43.3	27.5 29.1 30.7 33.7 36.9 38.4 40.3 41.6	34.8 36.7 38.8 41.8 44.0 45.0 47.7 49.5	24.2 26.5 27.8 34.2 34.1 29.9 35.7 35.8	22.1 23.8 26.0 29.5 32.5 32.9 35.2 37.5 36.4	41.3 43.2 45.3 47.2 49.5 52.0 54.1 55.9 56.9	18.6 19.7 20.8 23.5 27.4 29.1 30.0 30.8	12.8 13.5 15.1 17.3 20.0 20.4 21.3 22.7 21.8	57.1 61.5 59.6 65.9 77.5 88.4 88.6 84.3	28.9 30.5 32.5 34.6 36.7 38.2 40.4 42.6 41.9	39.3 41.1 43.6 46.3 48.2 49.5 52.1 54.3	24.5 26.1 28.0 29.8 32.1 33.8 35.9 38.2 38.3	28.3 30.1 32.5 36.2 39.5 39.1 41.7 44.1	32.3 34.6 36.8 34.6	54.3 57.5 59.8 62.6 66.5 68.8 72.0 75.6
1971 1972 1973 1974 1975 1976 1977 1978	42.5 46.6 50.4 50.2 45.8 49.4 53.1 56.0 57.7	40.4 43.9 47.3 47.2 44.6 47.7 51.6 54.7	51.8 56.0 58.5 56.8 54.5 59.0 62.7 64.6 63.7	38.4 41.4 45.0 38.9 37.5 42.7 48.3 48.0 43.2	38.5 44.1 47.1 44.3 38.8 43.6 48.7 50.9 51.2	58.5 62.2 64.1 64.2 63.1 67.0 69.4 71.9 71.5	26.8 29.3 33.4 35.1 32.1 33.7 37.7 41.9 46.8	20.8 23.6 27.4 29.0 25.9 27.6 31.9 36.0 40.5	64.2 62.4 68.4 70.6 71.2 69.1 61.9 63.0 67.5	43.2 48.2 51.6 51.1 45.9 49.0 53.2 56.2 57.9	54.1 61.4 66.6 65.0 55.1 59.3 64.6 68.3 70.0	39.5 43.5 46.2 46.1 42.5 45.3 49.1 51.7 53.5	43.2 47.6 51.9 51.8 46.1 50.1 53.6 56.3 57.8	35.3 39.5 43.8 43.7 37.5 41.8 45.2 48.2 49.5	80.1 83.1 85.2 84.8 84.0 85.9 88.6 89.7 92.1
1980 1981 1982 1983 1984 1985 1986 1987 1987	56.3 57.0 54.1 55.6 60.5 61.3 61.9 65.1 68.4 69.1	56.3 57.7 56.4 57.5 62.3 63.8 64.8 67.8 71.5 72.3	61.3 61.7 61.5 63.8 66.7 67.3 69.7 72.6 75.4 75.7	33.3 34.3 33.3 38.7 43.2 46.4 49.5 52.1 54.2	47.5 47.9 44.4 48.1 53.7 56.9 59.9 63.1 63.8	71.6 71.9 73.1 73.9 75.4 76.4 78.2 81.0 83.6 83.4	49.1 51.4 48.9 48.6 55.5 58.3 57.4 60.6 65.5 67.1	41.5 42.8 39.1 39.3 45.2 46.9 46.1 49.3 54.4 56.3	80.2 86.9 103.9 104.6 119.8 134.0 142.4 145.4 146.9 147.1	55.6 56.2 54.2 57.1 62.1 63.7 65.8 69.8 72.1 72.8	64.8 63.7 57.8 61.9 67.3 69.0 71.3 75.9 77.7 77.4	52.3 53.5 52.9 55.4 60.2 61.8 63.8 67.6 70.1 71.1	55.7 56.0 51.7 53.0 58.1 58.0 57.9 61.0 64.4 64.9	46.6 46.7 42.1 45.0 50.1 50.2 51.1 54.5 58.0 58.4	92.8 93.7 89.7 86.9 92.4 91.9 88.2 90.3 93.4 94.3
1990 1991 1992 1993 1994 1995 1996 1997 1998	69.7 68.7 70.6 72.9 76.8 80.4 84.0 90.1 95.4 99.5	73.1 72.2 73.9 76.2 79.4 82.8 85.9 91.6 96.9 99.6	76.0 75.9 78.2 80.7 84.3 86.9 88.6 91.8 95.2 97.1	50.8 47.4 55.5 61.3 68.7 70.8 73.0 78.5 83.7 91.7	63.7 61.9 64.7 69.2 74.9 79.4 83.1 88.5 95.5	84.8 86.0 86.6 87.8 90.0 92.2 93.4 95.6 97.6	68.6 66.3 67.0 69.1 71.7 76.4 82.2 92.5 101.8 106.0	58.4 57.4 59.6 62.3 66.0 71.7 78.5 90.3 100.5 106.4	142.0 131.5 122.0 115.3 108.3 105.2 102.0 100.7 105.1 102.2	73.9 72.1 74.1 76.7 80.3 83.3 86.7 92.3 97.5 101.2	76.8 72.6 75.7 79.0 84.7 86.7 90.5 95.0 100.1 102.7	72.8 71.8 73.5 75.8 78.8 82.1 85.2 91.3 96.5 100.6	65.3 64.3 66.4 68.6 73.1 77.2 81.2 87.8 93.1 98.7	58.5 57.2 60.0 62.7 67.7 72.4 76.9 85.0 91.4 98.5	96.2 96.3 95.4 95.7 97.2 98.7 100.2 100.0 100.4 99.9
2000	103.7 100.1 100.0 101.3 103.8 107.2 109.7 111.3 108.8 98.2	102.8 100.8 100.0 101.3 103.4 107.6 110.3 111.9 109.7	99.1 98.1 100.0 101.4 102.7 105.4 105.8 106.8 104.0 98.8	93.7 90.8 100.0 105.6 105.2 103.0 99.5 101.5 87.7 71.1	104.5 98.8 100.0 101.0 104.4 107.7 109.0 107.9 100.9 85.1	99.2 99.4 100.0 100.6 101.8 105.3 106.2 107.4 106.9 104.9	111.9 107.7 100.0 101.0 105.5 113.5 122.5 125.8 125.4 109.1	114.7 108.0 100.0 100.0 105.3 112.6 123.2 126.4 125.0 108.9	91.3 100.0 100.0 106.7 104.7 115.8 113.4 117.6 120.6 120.9	105.2 100.7 100.0 101.1 103.3 107.1 108.7 108.9 104.6 91.5	105.0 100.1 100.0 99.7 102.0 106.6 109.0 106.9 100.1 82.2	105.2 101.0 100.0 101.7 103.8 107.3 108.5 109.9 106.7 95.9	104.0 99.1 100.0 101.3 104.5 107.0 109.5 111.7 109.6 97.6	104.8 98.7 100.0 101.8 106.4 110.7 113.7 116.0 111.8 94.5	101.5 100.3 100.0 100.0 99.6 98.4 100.0 101.8 103.6 100.9
2008: Jan Feb Mar Apr June July Aug Sept Oct Nov Dec	112.3 112.0 111.6 111.0 110.7 110.4 110.4 109.2 104.8 106.2 104.8	112.9 112.5 111.9 111.1 110.8 110.9 110.6 109.0 106.3 107.0 106.7	106.9 106.7 105.6 105.0 104.7 104.8 104.5 102.7 101.4 103.0 102.0 100.6	99.4 98.6 92.8 87.6 87.9 90.9 92.4 83.1 84.2 81.5 79.0 74.5	105.9 104.5 104.5 104.2 103.8 103.2 103.0 101.0 98.7 97.2 93.7 90.5	108.2 107.6 107.7 107.3 107.1 106.6 105.9 104.3 107.0 106.7	129.4 128.7 129.7 128.0 128.0 128.1 127.4 126.6 119.9 117.6 119.5	130.2 129.8 130.8 128.4 128.4 128.2 127.4 126.2 117.7 114.8 117.6 120.8	122.3 120.5 120.7 120.8 120.2 121.9 120.2 120.8 118.9 120.4 120.0 119.9	108.5 108.0 107.5 106.9 106.3 105.7 105.7 104.9 102.6 102.2 99.8 96.5	105.0 104.0 103.3 102.1 102.2 101.7 102.4 101.2 99.1 97.8 93.6 89.1	110.2 109.9 109.4 109.1 108.3 107.6 107.3 106.6 104.3 104.3 102.8	113.2 113.1 112.9 112.4 112.1 111.7 111.9 110.9 104.3 106.9 104.7	117.1 116.5 116.3 115.6 115.1 114.8 114.4 113.5 107.8 108.2 103.7 98.0	104.2 104.9 104.6 104.6 104.0 105.2 104.0 96.2 102.3 104.3
2009: Jan Feb Mar Apr May June July Aug P Sept P Oct P Nov P Dec P	100.1 99.3 97.7 97.2 96.2 95.8 96.9 98.3 98.9 99.1 99.7 100.3	103.4 102.7 101.6 100.7 99.5 98.9 100.1 101.5 102.3 102.8 102.7 103.4	98.6 98.7 98.3 97.9 96.9 96.3 97.3 98.7 100.3 100.3 100.9	58.7 64.2 66.2 66.4 63.5 61.3 72.6 76.8 81.7 80.0 81.9 81.5	90.0 87.7 85.6 85.7 84.3 83.7 84.8 84.3 84.4 85.5 84.4	105.9 105.5 105.0 104.4 103.8 103.5 102.8 104.2 104.7 105.7 105.2 106.2	116.7 113.6 110.3 108.2 106.2 105.7 107.3 108.7 108.9 109.3 108.8	115.7 113.6 110.6 108.5 106.2 105.8 107.3 108.8 109.0 108.2 109.2	120.5 118.4 119.2 119.0 119.7 119.8 122.0 123.4 125.4 124.5 123.0 122.6	94.7 93.2 91.4 91.1 90.5 90.7 91.1 90.9 90.7 91.5 91.6	85.8 84.6 82.7 82.0 82.1 82.5 82.8 81.8 80.5 81.7 80.1	98.9 97.3 95.6 95.5 94.5 94.6 95.0 95.3 95.6 96.2 97.2	99.0 98.5 96.2 95.2 94.7 96.4 97.9 98.7 98.8 100.0 100.8	95.4 95.3 92.7 92.9 92.0 91.7 93.9 95.4 96.2 96.1 97.8 98.2	103.6 102.2 101.3 100.1 99.0 98.0 98.2 99.8 100.6 101.0 102.8

<sup>&</sup>lt;sup>1</sup> Includes other items not shown separately.

Note: See footnote 1 and Note, Table B-51.

Table B-53. Industrial production indexes, selected manufacturing industries, 1967-2009

[2002=100; monthly data seasonally adjusted]

				Ourable ma		ng		iuny uuju		No	ndurable r	nanufactu	ring	
Year or month		nary etal	Fabri-		elect	ter and ronic lucts	Transpo equip	ortation ment			Printing		Plastics	
real of monut	Total	Iron and steel prod- ucts	cated metal prod- ucts	Ma- chinery	Total	Se- lected high- tech- nology <sup>1</sup>	Total	Motor vehi- cles and parts	Apparel	Paper	and sup- port	Chem- ical	and rubber prod- ucts	Food
1967 1968 1969						0.3 .3 .3								
1970						.3								
1971 1972	122.0	129.1	69.1	68.0	1.4	.3 .3 .4	53.1	44.3	169.9	66.3	51.6	47.8	34.9	58.7
1973	142.0	154.8	76.3	78.5	1.7	.4	60.7	50.7	175.1	71.6	54.2	52.3	39.2	58.8
1974 1975	145.6 113.0	165.4 122.7	75.0 64.8	82.4 71.8	1.9 1.7	.5 .5 .6	55.9 50.7	43.5 38.0	163.0 159.5	74.7 64.6	52.6 49.1	54.4 47.8	38.2 32.7	59.4 58.3
1976	120.0	127.3	69.4	74.9	2.0	.6	56.8	48.5	168.5	71.4	52.7	53.5	36.2	63.0
1977 1978	121.2 129.0	124.4 133.6	75.3 79.0	81.8 88.1	2.6 3.1 3.9	1.0	61.7 65.7	55.1 57.4	179.1 184.3	74.5 77.9	57.1 60.4	58.2 61.1	42.6 44.1	64.1 66.1
19/9	132.1	138.3	82.5	93.0		1.3	66.3	52.6	174.6	79.0	62.2	62.5	43.4	65.4
1980 1981	116.1 116.2	117.3 121.6	77.8 77.3	88.5 87.6	4.7 5.4	1.6 1.9	58.8 56.6	38.8 37.8	177.2 176.2	78.8 79.9	62.7 64.3	59.1 60.1	38.6 40.9	66.6 67.5
1982 1983	82.2 84.2	74.7 75.4	69.2 69.8	73.3 66.1	6.1 7.1	1.9 2.2 2.6	52.1 57.5	34.1 43.5	178.5 183.7	78.6 83.7	69.1 74.3	56.2 60.1	40.2 43.7	70.1 70.9
1984	92.3	83.0	75.9	77.2	8.7	3.4	65.3	52.2	186.3	87.9	80.9	63.6	50.5	72.3
1985 1986	85.2 83.2	77.1	77.0 76.5	77.4 76.2	9.3 9.6	3.6 3.7	68.7 70.3	54.2 54.1	179.0 181.1	86.2 89.8	84.2 88.4	63.1 65.9	52.5 54.7	74.9 76.1
1987	89.7 100.2	85.7 99.7	77.9 81.9	77.8 85.7	11.0	4.5	72.9 77.4	56.1 59.9	182.3 179.1	92.7 96.4	94.9 98.0	71.0 75.1	60.6	76.1 77.7 79.7
1988 1989	97.9	96.2	81.3	88.8	12.3 12.7	5.4 5.7	78.9	59.3	170.2	97.4	98.4	76.5	63.2 65.4	79.7
1990	96.7	95.1	80.3	86.7	13.8	6.4	76.5	55.8	166.8	97.4	102.1	78.3	67.2	82.3
1991 1992	90.8 93.0	86.9 90.9	76.6 79.0	81.4 81.1	14.3 16.1	6.9 8.2	73.4 76.1	53.3 60.7	167.7 170.9	97.6 100.0	98.9 104.3	78.0 79.2	66.5 71.6	83.8 85.4
1993 1994	97.5 104.9	96.4 103.9	82.0 89.1	87.2 95.5	17.7 20.7	9.6 12.1	78.3 82.0	67.0 77.0	174.9 178.4	101.1 105.5	104.6 105.7	80.1 82.2	76.7 83.0	87.6 88.2
1995	106.0	105.6	94.6	102.2	26.7	16.9	82.1	79.3	178.6	107.0	107.3	83.5	85.1	90.4
1996 1997	108.6 113.3	108.1 111.4	98.0 102.5	105.8 111.6	34.5 46.1	24.1 35.3	83.6 91.1	79.9 86.1	173.6 171.6	103.7 105.9	108.0 110.2	85.3 90.3	87.9 93.4	88.6 91.0
1998 1999	115.3 115.1	111.2 111.9	105.8 106.4	114.5 112.0	59.2 77.2	49.1 70.0	99.2 104.6	90.6 100.5	162.5 155.6	106.7 107.6	111.5 112.4	91.8 93.6	96.7 101.9	95.0 96.0
2000	111.4	110.8	110.7	117.7	101.4	98.3	99.7	99.9	148.0	105.3	113.1	95.0	102.9	97.7
2001	99.5	96.8 100.0	102.6 100.0	104.2 100.0	103.3 100.0	101.3 100.0	96.2 100.0	91.4 100.0	126.9 100.0	99.3	106.3 100.0	93.4 100.0	96.9 100.0	97.7 100.0
2003	99.1	101.2	98.7	99.7	114.3	120.5 137.9	101.0	103.5	92.8	96.8	96.2	101.3	100.3	101.0
2004	110.0 108.0	110.1	98.9 103.4	103.7 110.2	129.9 144.5	158.8	100.7 104.5 104.2	103.7 103.9	79.8 76.9	97.6 97.5	96.9 99.2	105.6 109.3	101.5 102.3	101.1 104.2
2006 2007	112.6 110.0	119.3 115.8	109.0 112.1	115.5 116.4	163.8 176.7	189.1 213.7	104.2 106.1	100.2 97.4	75.3 76.5	97.6 95.9	99.8 100.6	112.7 114.1	102.9 104.7	105.4 109.5
2008	102.4	105.2	110.1	109.4	192.9	238.0	96.1	83.3	72.6	92.1	93.9	108.8	99.1	111.1
2009 P 2008: Jan	67.3 113.2	59.9 121.8	89.4 113.6	85.7 114.9	172.9 191.0	204.1 237.5	79.6 106.4	59.9 94.6	62.3 75.9	82.1 95.5	80.2 98.6	104.2 114.0	84.2 103.5	110.7 111.3
Feb	111.9	123.4	113.5	113.6	194.0	242.2	105.2	94.2	75.3	94.0	97.1	113.2	102.9	111.4
Mar Apr	110.6 109.7	119.6 118.0	113.6 112.6	114.8 111.2	197.5 199.2	248.1 251.2	101.6 98.2	88.7 83.9	74.0 73.1 71.5	94.8 94.1	98.0 96.9	112.6 112.2 112.1	101.9 100.9	112.4 112.2 111.5
May June	107.8 107.9	114.5 114.3	112.1 110.5	110.9 110.6	199.4 199.0	250.3 248.4	97.9 100.1	83.9 86.4	71.5 72.5	96.2 94.3	96.4 93.4	112.1 111.0	100.8 101.2	111.5 111.2
July	110.1	118.9 116.9	109.8 110.2	109.2	198.0 196.6	246.6 243.6	100.9 94.6	88.7 79.2	73.7 74.2	94.0 94.2	91.9 93.0	110.6	101.5	111.2 110.5
Aug Sept	108.6 102.0	104.9	109.2	110.2 107.3	194.2	24N N	88.2	79.9	72.8	91.3	92.3	109.7 101.0	97.7	110.7 110.4
Oct Nov	93.2 81.4	88.5 68.3	107.3 106.0	106.1 104.0	188.4 180.7	228.4 214.3	85.1 86.5	76.9 74.2	71.4 69.6	89.7 85.9	91.9 90.6	106.7 103.2	96.0 93.7	111.8 111.7
Dec	71.9	53.3	102.4	99.7	176.2	204.9	88.3	69.2	67.7	81.3	87.4	98.7	89.4	108.6
2009: Jan Feb	67.3 64.5	48.4 49.0	98.2 95.6	96.2 94.0	174.9 171.6	204.2 199.5	75.3 77.7	51.2 55.8	65.5 64.5	80.1 82.9	85.3 82.7	99.8 101.6	88.2 86.0	108.3 109.5
Mar	60.7	44.8	91.3	88.7	171.4	200.4	78.0	56.7	64.7	78.9	81.6	101.3	83.4	109.0
Apr May	60.3 59.2	43.5 45.9	89.4 87.5	86.6 83.9	172.5 170.3	203.6 199.0	77.3 74.0	56.6 52.4	63.1 63.6	78.2 80.9	80.1 79.6	102.7 102.4	82.9 82.2 82.2	109.8 110.9
.lune	61.1 68.0	53.0 64.3	87.2 87.2	82.0 82.6	169.6 173.3	199.7 205.5	72.3 80.4	49.5 61.1	59.5 60.9	82.5 82.6	80.2 79.9	103.1 103.8	82.2 83.2	110.3 109.2
Aug p	71.7	69.9 73.7	87.6	84.2	174.2	205.8	82.3 86.2	63.6	61.3	84.4	80.2 79.4	105.1	83.6 84.2	111.8 111.7
July Aug <sup>p</sup> Sept <sup>p</sup> Oct <sup>p</sup>	73.4 74.3	78.6	88.2 88.0	83.1 85.0	173.8 174.1	204.4 206.2	84.6	69.0 67.3	61.4 60.9	83.7 81.7	79.2	106.5 106.5	85.3	113.0
Nov <sup>p</sup> Dec <sup>p</sup>	77.8 78.1	80.0 80.8	87.9 88.7	83.5 85.4	173.9 176.7	206.4 211.4	85.0 85.1	68.3 68.3	61.6 61.9	85.8 84.0	79.0 78.5	108.3 109.7	86.2 86.6	112.9 112.0
DEC 5	/0.1	1 00.0	00.7	00.4	1/0./	411.4	00.1	00.3	01.9	04.0	70.3	103.7	00.0	112.0

<sup>&</sup>lt;sup>1</sup> Computers and peripheral equipment, communications equipment, and semiconductors and related electronic components.

Note: See footnote 1 and Note, Table B-51.

Table B-54. Capacity utilization rates, 1962-2009

				facturing	y data seasonal	iy aujusteuj		S	tage-of-proce:	38
Year or month	Total industry <sup>2</sup>	Total <sup>2</sup>	Durable goods	Nondurable goods	Other (non-NAICS) <sup>2</sup>	Mining	Utilities	Crude	Primary and semi- finished	Finished
1962 1963 1964 1965 1966 1966 1967 1968	87.0 87.4 87.4	81.4 83.5 85.6 89.5 91.1 87.2 87.1 86.7	87.5 87.3 87.1	86.3 86.5 86.2		81.2 83.6 86.7	94.5 95.1 96.8	81.1 83.4 85.6	81.5 83.8 87.8 91.0 91.4 85.0 86.8 88.1	81.6 83.4 84.6 88.8 91.1 88.2 87.1 85.6
1970 1971 1972 1973 1974 1975 1976 1977 1978	81.3 79.7 84.7 88.3 85.1 75.7 79.7 83.4 85.0 85.0	79.5 78.0 83.4 87.6 84.4 73.5 78.2 82.4 84.3 84.0	77.7 75.5 82.1 88.5 84.6 71.6 76.3 81.2 83.8	82.2 81.9 85.3 86.6 84.2 76.0 81.0 84.2 84.9 83.6	85.8 84.7 82.8 77.2 77.5 83.3 85.0 85.7	89.1 87.8 90.7 91.6 90.9 89.0 89.4 89.5 89.6	96.3 94.7 95.3 93.3 86.9 85.1 85.5 86.6 86.9	85.1 84.3 88.5 90.4 91.1 83.9 86.9 88.9 88.4 89.3	81.5 81.7 88.2 92.1 87.4 75.1 80.0 84.5 86.2 86.0	78.2 75.7 79.7 83.1 80.1 73.5 76.7 79.9 82.1 81.8
1980	80.7 79.6 73.7 74.9 80.5 79.3 78.6 81.2 84.3 83.7	78.7 77.0 70.9 73.5 79.4 78.2 78.4 81.0 84.0 83.2	77.6 75.2 66.6 68.7 76.8 75.7 75.3 77.6 82.0 81.6	79.5 78.8 76.3 79.5 82.4 80.8 81.9 84.8 86.1 85.0	87.1 87.5 87.4 88.1 89.5 90.3 88.9 90.7 88.6 85.3	91.1 90.8 84.2 79.8 85.7 84.3 77.6 80.3 84.3 85.3	85.5 84.4 80.2 79.6 82.1 81.8 81.0 83.6 86.6 86.8	88.9 89.1 82.2 79.8 85.6 83.9 79.3 83.1 86.8 87.3	78.8 77.3 70.5 74.5 81.1 79.7 79.7 82.8 85.8 84.7	79.5 77.6 73.3 73.3 77.4 76.8 77.1 78.7 81.6 81.4
1990	82.5 79.8 80.4 81.5 83.5 84.0 83.4 84.2 83.0 81.9	81.7 78.4 79.5 80.4 82.7 83.2 82.2 81.8 80.7	79.4 75.1 76.9 78.6 81.7 82.5 81.8 82.7 81.2 80.4	84.4 82.4 82.7 82.6 84.3 84.3 82.9 83.6 82.2 80.3	83.8 81.0 80.0 81.2 81.1 82.0 80.7 84.9 85.6 86.1	86.9 85.1 84.6 85.9 87.7 88.1 90.4 91.4 89.2 86.1	86.5 87.8 86.3 88.3 88.4 89.3 90.8 90.3 92.7 94.1	88.2 85.6 85.6 85.9 88.2 89.0 88.8 90.7 87.7 86.6	82.7 79.8 81.5 83.5 86.5 86.6 85.8 86.2 84.3 84.2	80.6 78.0 77.9 78.0 79.0 79.7 79.2 80.2 80.4 78.3
2000	81.7 76.1 74.6 75.8 77.9 80.1 80.9 80.6 77.6	80.1 73.8 72.7 73.7 76.2 78.6 79.4 79.0 75.1 66.9	80.0 71.4 69.3 70.6 73.5 76.3 77.9 77.2 60.4	79.1 75.8 76.3 76.9 78.6 80.6 80.7 80.8 77.7	87.9 83.4 80.8 82.0 84.5 84.4 83.0 81.3 76.0 64.0	90.7 90.4 86.1 88.0 88.3 88.6 90.4 89.2 90.1 84.2	93.8 89.6 87.7 86.0 84.8 85.2 83.4 85.4 83.8 80.2	88.5 85.3 82.7 84.4 86.1 86.5 88.3 87.8 86.5	84.4 77.4 76.6 77.7 79.8 81.7 81.7 81.0 77.3 67.5	77.1 72.5 70.7 71.6 73.3 76.0 77.1 77.5 74.1 68.5
2008: Jan   Feb   Mar   Apr   June   July   Aug   Sept   Oct   Nov   Dec   2009: Jan   Apr   Mar   Mar	80.5 80.2 79.8 79.2 78.9 78.7 78.6 77.6 74.5 75.4 72.7 71.1 70.6 69.5 69.5	78.5 78.0 77.8 77.0 76.7 76.1 75.3 72.5 72.7 71.1 69.0 67.1 66.0 65.8	76.8 76.1 75.8 74.6 74.3 74.2 74.1 73.0 70.7 68.8 67.2 65.4 62.0 61.2 59.9 59.9	80.2 79.8 79.7 79.4 78.6 78.3 77.9 74.3 76.8 75.1 72.6 72.4 73.2 72.8	79.8 79.3 79.4 77.8 76.8 76.7 75.4 75.0 74.3 73.3 72.9 71.3 68.7 67.8 64.2 63.4	90.6 91.2 90.8 90.9 90.8 90.7 92.3 91.8 83.1 89.2 90.7 89.0 88.4 87.1 84.9 82.7	86.5 86.7 84.5 85.1 83.7 84.4 83.1 80.2 81.2 82.1 83.5 85.1 85.1 80.8 80.8	88.8 88.9 88.8 88.5 88.6 87.6 88.7 84.7 84.7 84.7 82.1 81.5 79.5 79.5	80.6 80.3 79.6 79.4 78.8 78.7 78.3 77.1 74.9 75.4 73.5 71.4 69.7 68.5 67.1 67.0	77.1 76.6 76.3 75.2 75.0 74.9 74.6 73.7 72.2 71.5 71.2 70.3 68.5 68.6 68.2 67.6
May	68.5 68.3 69.2 70.2 70.8 71.0 71.5 72.0	65.3 65.1 66.2 67.2 67.8 67.8 68.5 68.6	58.2 57.8 59.9 60.7 61.4 61.2 61.7 61.8	73.2 73.3 73.4 74.6 75.1 75.4 76.4 76.5	62.9 63.0 62.4 63.2 63.7 62.5 63.6 62.6	81.9 80.7 82.0 83.8 83.7 83.8 85.5 85.7	79.2 78.7 77.8 78.2 78.5 80.5 78.4 82.9	79.8 79.5 81.0 82.7 83.9 83.8 85.6 86.1	65.9 65.8 66.5 67.1 67.6 67.9 68.2 68.9	67.0 66.6 67.6 68.9 69.3 69.5 69.9 70.2

<sup>&</sup>lt;sup>1</sup> Output as percent of capacity. <sup>2</sup> See footnote 1 and Note, Table B–51.

### TABLE B-55. New construction activity, 1964-2009

[Value put in place, billions of dollars; monthly data at seasonally adjusted annual rates]

		[vaido pa	- III pidoo,	51110110 0		ate constru		oonany ac	ajuotou un	inuai rates		lic constru	ction
Year or month	Total new con-		Resid build	ential ings <sup>1</sup>		No	nresidentia other cor	l buildings struction	and				State
rear or month	struc- tion	Total	Total <sup>2</sup>	New housing units <sup>3</sup>	Total	Lodging	Office	Com- mer- cial <sup>4</sup>	Manu- factur- ing	Other <sup>5</sup>	Total	Federal	and local
1964	75.1 81.9 85.8 87.2 96.8 104.9	54.9 60.0 61.9 61.8 69.4 77.2	30.5 30.2 28.6 28.7 34.2 37.2	24.1 23.8 21.8 21.5 26.7 29.2	24.4 29.7 33.3 33.1 35.2 39.9						20.2 21.9 23.8 25.4 27.4 27.8	3.7 3.9 3.8 3.3 3.2 3.2	16.5 18.0 20.0 22.1 24.2 24.6
1970	105.9 122.4 139.1 153.8 155.2 152.6 172.1 200.5 239.9 272.9	78.0 92.7 109.1 121.4 117.0 109.3 128.2 157.4 189.7 216.2	35.9 48.5 60.7 65.1 56.0 51.6 68.3 92.0 109.8 116.4	27.1 38.7 50.1 54.6 43.4 36.3 50.8 72.2 85.6 89.3	42.1 44.2 48.4 56.3 61.1 57.8 59.9 65.4 79.9 99.8						27.9 29.7 30.0 32.3 38.1 43.3 44.0 43.1 50.1 56.6	3.1 3.8 4.2 4.7 5.1 6.1 6.8 7.1 8.1	24.8 25.9 25.8 27.6 33.0 37.2 37.2 36.0 42.0 48.1
1980 1981 1982 1983 1984 1985 1986 1987 1988	273.9 289.1 279.3 311.9 370.2 403.4 433.5 446.6 462.0 477.5	210.3 224.4 216.3 248.4 300.0 325.6 348.9 356.0 367.3 379.3	100.4 99.2 84.7 125.8 155.0 160.5 190.7 199.7 204.5 204.3	69.6 69.4 57.0 95.0 114.6 115.9 135.2 142.7 142.4	109.9 125.1 131.6 122.6 144.9 165.1 158.2 156.3 162.8 175.1						63.6 64.7 63.1 63.5 70.2 77.8 84.6 90.6 94.7 98.2	9.6 10.4 10.0 10.6 11.2 12.0 12.4 14.1 12.3	54.0 54.3 53.1 52.9 59.0 65.8 72.2 76.6 82.5 86.0
1990 1991 1992 1993 1994 1995 1996 1997 1998	476.8 432.6 463.7 485.5 531.9 548.7 599.7 631.9 688.5 744.6	369.3 322.5 347.8 358.2 401.5 408.7 453.0 478.4 533.7 575.5	191.1 166.3 199.4 208.2 241.0 228.1 257.5 264.7 296.3 326.3	132.1 114.6 135.1 150.9 176.4 171.4 191.1 198.1 224.0 251.3	178.2 156.2 148.4 150.0 160.4 180.5 195.5 213.7 237.4 249.2	4.6 4.7 7.1 10.9 12.9 14.8 16.0	20.0 20.4 23.0 26.5 32.8 40.4 45.1	34.4 39.6 44.1 49.4 53.1 55.7 59.4	23.4 28.8 35.4 38.1 37.6 40.5 35.1	67.7 66.9 70.9 70.6 77.3 86.0 93.7	107.5 110.1 115.8 127.4 130.4 140.0 146.7 153.4 154.8 169.1	12.1 12.8 14.4 14.4 15.8 15.3 14.1 14.3	95.4 97.3 101.5 112.9 116.0 124.3 131.4 139.4 140.5 155.1
2000 2001 2002 2002 2003 2004 2005 2006 2007 2008	802.8 840.2 847.9 891.5 991.6 1,102.7 1,167.6 1,150.7 1,072.1	621.4 638.3 634.4 675.4 771.4 868.5 912.2 861.6 766.2	346.1 364.4 396.7 446.0 532.9 611.9 613.7 493.2 350.1	265.0 279.4 298.8 345.7 417.5 480.8 468.8 354.1 229.9	275.3 273.9 237.7 229.3 238.5 256.6 298.4 368.4 416.1	16.3 14.5 10.5 9.9 12.0 12.7 17.6 27.5 35.4	52.4 49.7 35.3 30.6 32.9 37.3 45.7 53.8 57.1	64.1 63.6 59.0 57.5 63.2 66.6 73.4 85.9 81.5	37.6 37.8 22.7 21.4 23.7 29.9 35.1 45.3 60.8	104.9 108.2 110.2 109.9 106.8 110.2 126.7 155.9 181.4	181.3 201.9 213.4 216.1 220.2 234.2 255.4 289.1 306.0	14.2 15.1 16.6 17.9 18.3 17.3 17.6 20.6 23.8	167.2 186.8 196.9 198.2 201.8 216.9 237.8 268.5 282.1
2008: Jan Feb Mar Apr Apr July July Sept Oct Nov Dec 2009: Jan Feb Mar Apr May June July Aug Sept Oct Ct Nov Dec 2009: Jan Feb Mar Apr May June July Aug Sept Oct Pot Pot Pot Pot Pot Pot Pot Pot Pot Po	1,095.5 1,092.1 1,095.2 1,091.1 1,090.7 1,075.6 1,070.2 1,066.1 1,037.3 1,002.1 974.3 976.7 971.4 958.3 945.1 934.5 925.5 910.5 900.1	802.8 797.6 791.0 787.7 786.2 769.5 759.8 756.4 773.6 673.8 696.9 650.4 650.4 650.4 650.4 650.5 608.5 608.5 608.5 608.5 608.5 608.5 608.5 608.5 608.5	396.6 385.8 383.1 373.4 363.5 351.7 339.9 340.2 350.4 278.8 260.8 248.9 252.7 241.4 237.0 237.3 244.7 243.2 250.7	279.0 261.0 259.4 251.0 244.6 237.1 231.1 220.7 204.7 192.1 176.2 162.6 147.9 139.2 130.7 123.4 135.4 131.0 135.2 135.7	406.2 411.8 407.8 414.3 422.7 417.8 416.2 423.2 426.3 416.4 404.3 395.1 401.5 401.5 398.4 382.6 371.2 330.5 330.5	31.5 32.5 34.0 36.1 37.4 37.7 37.4 36.6 35.7 31.8 29.1 31.2 28.4 27.4 24.2 21.6 19.6 19.6	57.9 58.0 56.6 57.3 57.0 57.5 57.9 58.4 56.5 55.8 49.0 48.4 48.1 42.1 40.0 33.3 35.3 34.8	88.1 88.2 85.1 87.5 85.2 84.0 82.8 79.9 76.5 73.5 71.0 66.5 65.0 62.1 58.8 48.8 48.0 44.2	52.9 54.3 53.6 55.3 57.1 58.4 57.3 61.1 65.8 71.0 70.2 77.3 81.3 82.0 84.1 78.6 77.6 67.9 65.6	175.9 178.8 178.5 178.1 186.0 180.2 185.0 179.8 184.3 185.8 180.7 172.9 174.7 175.3 181.3 181.8 180.9 177.4 176.4	292.7 294.5 304.2 303.4 306.1 310.4 309.7 307.6 310.5 305.6 309.5 316.3 317.5 325.6 325.8 320.4 320.0 320.1	21.4 21.7 22.1 22.7 22.8 22.7 24.9 24.8 25.0 26.2 28.3 27.5 27.0 27.5 27.0 29.1 29.9 27.7 27.7 27.7 27.7	271.3 272.8 283.1 280.7 281.6 283.9 285.5 284.9 283.9 285.1 284.3 277.3 273.4 289.1 291.7 291.5 296.5 295.9 295.9 292.3 293.1

Note: Data beginning with 1993 reflect reclassification.

<sup>1</sup> Includes farm residential buildings. 2 Includes residential improvements, not shown separately.

<sup>2</sup> Includes residential improvements, not shown separately.

3 New single- and multi-family units.
4 Including farm.
5 Health care, educational, religious, public safety, amusement and recreation, transportation, communication, power, highway and street, sewage and waste disposal, water supply, and conservation and development.

TABLE B-56. New private housing units started, authorized, and completed and houses sold, 1962-2009

[Thousands; monthly data at seasonally adjusted annual rates]

		New housing	units started		N	ew housing ur	nits authorized	1		
Year or month		Type of s	structure			Type of s	structure		New housing	New houses
Tour or monar	Total	1 unit	2 to 4 units <sup>2</sup>	5 units or more	Total	1 unit	2 to 4 units	5 units or more	units completed	sold
1962 1963 1964 1965 1966	1,462.9 1,603.2 1,528.8 1,472.8 1,164.9 1,291.6 1,507.6	991.4 1,012.4 970.5 963.7 778.6 843.9	47 59 108.3 86.7 61.2 71.7	1.5 0.8 450.0 422.5 325.1 376.1	1,186.6 1,334.7 1,285.8 1,240.6 971.9 1,141.0 1,353.4	716.2 750.2 720.1 709.9 563.2 650.6	87.1 118.9 100.8 84.8 61.0 73.0	383.3 465.6 464.9 445.9 347.7 417.5		560 565 575 461 487
1968 1969 1970	1,466.8 1.433.6	899.4 810.6 812.9	80.7 85.1 84.9	527.3 571.2 535.9	1,322.3 1.351.5	694.7 624.8 646.8	84.3 85.2 88.1	574.4 612.4 616.7	1,319.8 1,399.0 1,418.4	490 448 485
1971 1972 1973 1974 1975 1976 1977 1978	2,052.2 2,356.6 2,045.3 1,337.7 1,160.4 1,537.5 1,987.1 2,020.3 1,745.1	1,151.0 1,309.2 1,132.0 888.1 892.2 1,162.4 1,450.9 1,433.3 1,194.1	120.5 141.2 118.2 68.0 64.0 85.8 121.7 125.1	780.9 906.2 795.0 381.6 204.3 289.2 414.4 462.0 429.0	1,924.6 2,218.9 1,819.5 1,074.4 939.2 1,296.2 1,690.0 1,800.5 1,551.8	906.1 1,033.1 882.1 643.8 675.5 893.6 1,126.1 1,182.6 981.5	132.9 148.6 117.0 64.3 63.9 93.1 121.3 130.6 125.4	885.7 1,037.2 820.5 366.2 199.8 309.5 442.7 487.3 444.8	1,706.1 2,003.9 2,100.5 1,728.5 1,317.2 1,377.2 1,657.1 1,867.5 1,870.8	656 718 634 519 549 646 819 817 709
1980 1981 1982 1983 1984 1985 1986 1987 1987	1,292.2 1,084.2 1,062.2 1,703.0 1,749.5 1,741.8 1,805.4 1,620.5 1,488.1 1,376.1	852.2 705.4 662.6 1,067.6 1,084.2 1,072.4 1,179.4 1,146.4 1,081.3 1,003.3	109.5 91.2 80.1 113.5 121.4 93.5 84.0 65.1 58.7 55.3	330.5 287.7 319.6 522.0 543.9 576.0 542.0 408.7 348.0 317.6	1,190.6 985.5 1,000.5 1,605.2 1,681.8 1,733.3 1,769.4 1,534.8 1,455.6 1,338.4	710.4 564.3 546.4 901.5 922.4 956.6 1,077.6 1,024.4 993.8 931.7	114.5 101.8 88.3 133.6 142.6 120.1 108.4 89.3 75.7 67.0	365.7 319.4 365.8 570.1 616.8 656.5 583.5 421.1 386.1 339.8	1,501.6 1,265.7 1,005.5 1,390.3 1,652.2 1,703.3 1,756.4 1,668.8 1,529.8	545 436 412 623 639 688 750 671 676 650
1990	1,192.7 1,013.9 1,199.7 1,287.6 1,457.0 1,354.1 1,474.0 1,616.9 1,640.9	894.8 840.4 1,029.9 1,125.7 1,198.4 1,076.2 1,163.7 1,271.4 1,302.4	37.6 35.6 30.9 29.4 35.2 33.8 45.3 44.6 31.9	260.4 137.9 139.0 132.6 223.5 244.1 270.8 295.8 302.9 306.6	1,110.8 948.8 1,094.9 1,199.1 1,371.6 1,332.5 1,425.6 1,441.1 1,612.3 1,663.5	793.9 753.5 910.7 986.5 1,068.5 997.3 1,069.5 1,069.4 1,187.6 1,246.7	54.3 43.1 45.8 52.3 62.2 63.7 65.8 68.5 69.2 65.8	262.6 152.1 138.4 160.2 241.0 271.5 290.3 310.3 355.5 351.1	1,308.0 1,090.8 1,157.5 1,192.7 1,346.9 1,312.6 1,412.9 1,400.5 1,474.2 1,604.9	534 509 610 666 670 667 757 804 886
2000	1,568.7 1,602.7 1,704.9 1,847.7 1,955.8 2,068.3 1,800.9 1,355.0 905.5 553.8	1,230.9 1,273.3 1,358.6 1,499.0 1,610.5 1,715.8 1,465.4 1,046.0 622.0 443.5	38.7 36.6 38.5 33.5 42.3 41.1 42.7 31.7 17.5 11.4	299.1 292.8 307.9 315.2 303.0 311.4 292.8 277.3 266.0 98.8	1,592.3 1,636.7 1,747.7 1,889.2 2,070.1 2,155.3 1,838.9 905.4 572.2	1,198.1 1,235.6 1,332.6 1,460.9 1,613.4 1,682.0 1,378.2 979.9 575.6 435.1	64.9 66.0 73.7 82.5 90.4 84.0 76.6 34.4 19.9	329.3 335.2 341.4 345.8 366.2 389.3 384.1 359.0 295.4 117.2	1,573.7 1,570.8 1,648.4 1,678.7 1,841.9 1,931.4 1,979.4 1,502.8 1,119.7 796.0	877 908 973 1,086 1,203 1,283 1,051 776 485 374
2008: Jan Feb Mar Apr June July Aug Sept Oct Nov Dec Mar Seb Mar Aug Dec Mar Aug	1,083 1,100 993 1,001 971 1,078 933 849 822 763 655 556	764 722 717 676 679 655 632 612 549 534 457 393	27 29 16 15 19 22 14 15 19 10	292 349 260 310 273 401 287 222 254 219 180 154	1,102 1,015 968 991 978 1,174 924 857 806 729 630	711 665 634 647 629 605 575 548 529 470 422	41 39 36 39 35 36 35 34 38 33 21 20	350 311 298 305 314 533 314 275 239 226 187	1,338 1,266 1,195 1,028 1,139 1,131 1,089 1,018 1,148 1,055 1,084 1,028	608 576 509 533 509 488 500 444 436 409 390
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov P Dec P	488 574 521 479 551 590 593 581 586 524 580 557	357 357 361 388 409 478 506 481 508 471 490 456	13 13 31 11 15 6 9 4 10 9	118 204 129 80 133 101 72 94 69 49 80	531 550 511 498 518 570 564 580 575 589 653	342 381 360 378 406 433 463 464 452 449 469 505	20 17 20 18 18 23 18 19 19 16 25	169 152 131 102 94 114 83 97 104 86 95	778 828 833 846 812 794 785 785 723 750 865	329 354 332 345 371 399 419 408 391 408 370 342

<sup>&</sup>lt;sup>1</sup> Authorized by issuance of local building permits in permit-issuing places: 20,000 places beginning with 2004; 19,000 for 1994–2003; 17,000 for 1984–93; 16,000 for 1978–83; 14,000 for 1972–77; 13,000 for 1967–71; 12,000 for 1963–66; and 10,000 prior to 1963.

<sup>2</sup> Monthly data derived.

Note: Data beginning with 1999 for new housing units started and completed and for new houses sold are based on new estimation methods and are not directly comparable with earlier data.

TABLE B-57. Manufacturing and trade sales and inventories, 1968-2009

[Amounts in millions of dollars; monthly data seasonally adjusted]

		manufactur and trade			anufacturir			Merchant holesalers			Retail trade		Retail and food
Year or month	Sales <sup>2</sup>	Inven- tories <sup>3</sup>	Ratio <sup>4</sup>	Sales <sup>2</sup>	Inven- tories <sup>3</sup>	Ratio <sup>4</sup>	Sales <sup>2</sup>	Inven- tories 3	Ratio <sup>4</sup>	Sales <sup>2, 5</sup>	Inven- tories <sup>3</sup>	Ratio <sup>4</sup>	services sales
SIC· 6 1968	98,685 105,690 108,221 116,895 131,081 153,677 177,912 182,198	156,611 170,400 178,594 188,991 203,227 234,406 287,144 288,992	1.59 1.61 1.65 1.62 1.55 1.53 1.61 1.59	50,229 53,501 52,805 55,906 63,027 72,931 84,790 86,589	90,560 98,145 101,599 102,567 108,121 124,499 157,625 159,708	1.80 1.83 1.92 1.83 1.72 1.71 1.86	21,012 22,818 24,167 26,492 29,866 38,115 47,982 46,634	27,166 29,800 33,354 36,568 40,297 46,918 58,667 57,774	1.29 1.31 1.38 1.38 1.35 1.23 1.22 1.24	27,445 29,371 31,249 34,497 38,189 42,631 45,141 48,975	38,885 42,455 43,641 49,856 54,809 62,989 70,852 71,510	1.42 1.45 1.40 1.45 1.44 1.48 1.57	
1974	182,198 204,150 229,513 260,320 297,701	318,345 350,706 400,931 452,640	1.56 1.53 1.54 1.52	98,797 113,201 126,905 143,936	174,636 188,378 211,691 242,157	1.77 1.66 1.67 1.68	50,698 56,136 66,413 79,051	64,622 73,179 86,934 99,679	1.27 1.30 1.31 1.26	54,655 60,176 67,002 74,713	79,087 89,149 102,306 110,804	1.45 1.48 1.53 1.48	
1980	327,233 355,822 347,625 369,286 410,124 422,583 430,419 457,735 497,157 527,039	508,924 545,786 573,908 590,287 649,780 664,039 662,738 709,848 767,222 815,455	1.56 1.53 1.67 1.56 1.53 1.56 1.55 1.50 1.49	154,391 168,129 163,351 172,547 190,682 194,538 194,657 206,326 224,619 236,698	265,215 283,413 311,852 312,379 339,516 334,749 322,654 338,109 369,374 391,212	1.72 1.69 1.95 1.78 1.73 1.73 1.68 1.59 1.57	93,099 101,180 95,211 99,225 112,199 113,459 114,960 122,968 134,521 143,760	122,631 129,654 127,428 130,075 142,452 147,409 153,574 163,903 178,801 187,009	1.32 1.28 1.36 1.28 1.23 1.28 1.32 1.32 1.30 1.28	79,743 86,514 89,062 97,514 107,243 114,586 120,803 128,442 138,017 146,581	121,078 132,719 134,628 147,833 167,812 181,881 186,510 207,836 219,047 237,234	1.52 1.53 1.49 1.44 1.49 1.52 1.56 1.55 1.54	
1990 1991 1992 NAICS: <sup>6</sup>	545,909 542,815 567,176	840,594 834,609 842,809	1.52 1.53 1.48	242,686 239,847 250,394	405,073 390,950 382,510	1.65 1.65 1.54	149,506 148,306 154,150	195,833 200,448 208,302	1.29 1.33 1.32	153,718 154,661 162,632	239,688 243,211 251,997	1.56 1.54 1.52	
1992 1993 1994 1995 1996 1997 1998	540,573 567,580 610,253 655,097 687,350 723,879 742,837 786,634	836,992 864,028 927,330 986,089 1,005,506 1,046,750 1,078,738 1,138,982	1.53 1.50 1.46 1.48 1.46 1.42 1.43	242,002 251,708 269,843 289,973 299,766 319,558 324,984 335,991	378,709 379,660 399,910 424,772 430,446 443,566 449,065 463,625	1.57 1.50 1.44 1.43 1.37 1.39 1.35	147,261 154,018 164,575 179,915 190,362 198,154 202,260 216,597	196,914 204,842 221,978 238,392 241,050 258,575 272,404 290,318	1.31 1.30 1.29 1.29 1.27 1.26 1.31	151,310 161,854 175,835 185,209 197,222 206,167 215,592 234,046	261,369 279,526 305,442 322,925 334,010 344,609 357,269 385,039	1.67 1.68 1.66 1.72 1.67 1.64 1.62 1.59	168,261 179,858 194,638 204,677 217,463 227,670 238,278 257,797
2000 2001 2002 2003 2004 2005 2006 2007 2008	834,325 818,615 823,714 853,596 923,319 1,000,368 1,064,187 1,102,196 1,136,984	1,198,022 1,120,422 1,140,904 1,147,981 1,239,685 1,306,598 1,390,670 1,446,313 1,455,753	1.41 1.43 1.36 1.34 1.30 1.27 1.28 1.28 1.32	350,715 330,875 326,227 334,616 359,081 395,173 418,330 423,423 431,929	481,673 427,720 422,724 407,967 440,330 472,398 510,865 529,957 541,767	1.35 1.38 1.28 1.24 1.19 1.16 1.19 1.23 1.28	234,546 232,096 236,294 246,857 274,710 297,915 323,396 345,871 375,059	309,462 297,927 301,891 307,642 337,983 362,451 392,291 416,632 429,572	1.29 1.32 1.26 1.23 1.18 1.17 1.16 1.17	249,063 255,644 261,194 272,123 289,528 307,280 322,461 332,902 329,996	406,887 394,775 416,289 432,372 461,372 471,749 487,514 499,724 484,414	1.59 1.58 1.55 1.56 1.56 1.51 1.50 1.49 1.52	274,518 282,131 288,845 301,264 320,526 340,057 357,284 369,385 367,741
2008: Jan	1,156,058 1,143,322 1,156,608 1,171,292 1,177,041 1,187,363 1,185,470 1,160,374 1,134,171 1,090,431 1,026,879 996,571	1,463,157 1,472,661 1,474,830 1,484,308 1,488,099 1,495,812 1,510,101 1,510,101 1,506,344 1,495,342 1,475,847 1,455,753	1.27 1.29 1.28 1.27 1.26 1.26 1.27 1.30 1.33 1.37 1.44	439,923 434,265 439,275 448,658 449,729 452,979 457,116 440,921 429,156 412,885 384,413 373,446	537,072 541,454 546,023 547,716 550,178 554,737 558,252 561,150 559,091 556,012 551,297 541,767	1.22 1.25 1.24 1.22 1.22 1.22 1.27 1.30 1.35 1.43 1.45	377,100 372,986 379,712 384,205 388,406 396,296 392,275 386,097 377,364 360,753 335,256 325,672	422,416 426,580 426,601 432,149 435,311 439,195 443,913 446,678 444,618 438,760 433,890 429,572	1.12 1.14 1.12 1.12 1.11 1.13 1.16 1.18 1.22 1.29 1.32	339,035 336,071 337,621 338,429 338,906 338,088 336,079 333,356 327,651 316,793 307,210 297,453	503,669 504,627 502,206 504,443 502,610 501,880 507,936 503,144 502,635 500,570 490,660 484,414	1.49 1.50 1.49 1.48 1.48 1.51 1.51 1.53 1.58 1.60 1.63	376,262 373,140 374,845 376,009 376,662 376,055 374,103 371,311 365,855 354,744 345,175 335,016
2009: Jan	985,402 986,065 969,020 968,183 967,835 977,786 981,770 993,217 994,916 1,006,760 1,027,359	1,437,899 1,417,350 1,399,094 1,381,276 1,364,131 1,344,127 1,329,165 1,308,296 1,303,701 1,307,801 1,313,168	1.46 1.44 1.43 1.41 1.37 1.35 1.32 1.31 1.30 1.28	363,750 362,685 357,240 357,324 354,190 360,117 362,611 362,269 366,882 370,294 374,174	535,486 527,872 521,501 515,642 511,305 505,009 500,593 496,549 492,559 494,397 495,143	1.47 1.46 1.46 1.44 1.40 1.38 1.37 1.34 1.34	317,731 318,491 310,723 310,742 312,050 312,941 314,709 318,069 322,169 326,645 337,396	425,915 418,539 411,092 405,599 400,795 392,493 386,330 381,146 378,281 380,574 386,263	1.34 1.31 1.32 1.31 1.28 1.25 1.23 1.20 1.17 1.17	303,921 304,889 301,057 300,117 301,595 304,728 304,450 312,879 305,865 309,821 315,789	476,498 470,939 466,501 460,035 452,031 446,625 442,242 430,601 432,861 432,830 431,762	1.57 1.54 1.55 1.53 1.50 1.47 1.45 1.38 1.42 1.40 1.37	342,017 343,438 339,228 338,344 339,873 342,912 342,489 350,800 343,687 347,641 353,951

Excludes manufacturers' sales branches and offices.
 Annual data are averages of monthly not seasonally adjusted figures.
 Seasonally adjusted, end of period. Inventories beginning with January 1982 for manufacturing and December 1980 for wholesale and retail trade are not comparable with earlier periods.

 Inventory/sales ratio. Monthly inventories are inventories at the end of the month to sales for the month. Annual data beginning with 1982 are the average of monthly ratios for the year.
 Seod services included on Standard Industrial Classification (SIC) basis and excluded on North American Industry Classification System (NAICS) basis. See

last column for retail and food services sales.

<sup>6</sup> Effective in 2001, data classified based on NAICS. Data on NAICS basis available beginning with 1992. Earlier data based on SIC. Data on both NAICS and SIC basis include semiconductors.

TABLE B-58. Manufacturers' shipments and inventories, 1968-2009

[Millions of dollars; monthly data seasonally adjusted]

		Shipments <sup>1</sup>						Inventories <sup>2</sup>	2			
		Б 11	Non-		[	Ourable goo	ds industrie	S	No	ondurable go	ods industr	ies
Year or month	Total	Durable goods indus- tries	durable goods indus- tries	Total	Total	Materi- als and supplies	Work in process	Finished goods	Total	Materi- als and supplies	Work in process	Finished goods
<i>SIC: <sup>3</sup></i> 1968 1969	50,229 53,501	27,624 29,403	22,605 24,098	90,560 98,145	58,732 64,598	17,344 18,636	27,213 30,282	14,175 15,680	31,828 33,547	12,328 12,753	4,852 5,120	14,648 15,674
1070	52,805 55,906 63,027	28,156 29,924 33,987	24,649 25,982 29,040	101,599 102,567 108,121	66,651 66,136 70,067	19,149 19,679 20,807	29,745 28,550 30,713	17,757 17,907 18,547	34,948 36,431 38,054	13,168 13,686 14,677	5,271 5,678 5,998	16,509 17,067 17,379
1970 1971 1972 1973 1974 1975 1976 1977 1978	72,931 84,790 86,589 98,797 113,201 126,905	39,635 44,173 43,598 50,623	33,296 40,617 42,991 48,174 54,033 59,174	124,499 157,625 159,708 174,636 188,378 211,691	81,192 101,493 102,590 111,988 120,877 138,181	25,944 35,070 33,903 37,457 40,186 45,198	35,490 42,530 43,227 46,074 50,226	19,758 23,893 25,460 28,457 30,465 34,135	43,307 56,132 57,118 62,648 67,501 73,510	18,147 23,744 23,565 25,847 27,387 29,619	6,729 8,189 8,834 9,929 10,961	18,431 24,199 24,719 26,872 29,153 31,806
1978 1979 1980	126,905 143,936 154,391	59,168 67,731 75,927 77,419	59,174 68,009 76,972	211,691 242,157 265,215	138,181 160,734 174,788	45,198 52,670 55,173	58,848 69,325 76,945	34,135 38,739 42,670	73,510 81,423 90,427	29,619 32,814 36,606	12,085 13,910 15,884	31,806 34,699 37,937
1980 1981 1982 1983 1983 1985 1986 1986 1987	168,129 163,351 172,547 190,682 194,538 194,657 206,326 224,619 236,698	83,727 79,212 85,481 97,940 101,279 103,238 108,128 118,458 123,158	84,402 84,139 87,066 92,742 93,259 91,419 98,198 106,161 113,540	283,413 311,852 312,379 339,516 334,749 322,654 338,109 369,374 391,212	186,443 200,444 199,854 221,330 218,193 211,997 220,799 242,468 257,513	57,998 59,136 60,325 66,031 63,904 61,331 63,562 69,611 72,435	80,998 86,707 86,899 98,251 98,162 97,000 102,393 112,958 122,251	47,447 54,601 52,630 57,048 56,127 53,666 54,844 59,899 62,827	96,970 111,408 112,525 118,186 116,556 110,657 117,310 126,906 133,699	38,165 44,039 44,816 45,692 44,106 42,335 45,319 49,396 50,674	16,194 18,612 18,691 19,328 19,442 18,124 19,270 20,559 21,653	42,611 48,757 49,018 53,166 53,008 50,198 52,721 56,951 61,372
1990	242,686 239,847 250,394	123,776 121,000 128,489	118,910 118,847 121,905	405,073 390,950 382,510	263,209 250,019 238,105	73,559 70,834 69,459	124,130 114,960 104,424	65,520 64,225 64,222	141,864 140,931 144,405	52,645 53,011 54,007	22,817 22,815 23,532	66,402 65,105 66,866
1993 1994 1995 1996 1997 1998	242,002 251,708 269,843 289,973 299,766 319,558 324,984 335,991	126,572 133,712 147,005 158,568 164,883 178,949 185,966 193,895	115,430 117,996 122,838 131,405 134,883 140,610 139,019 142,096	378,709 379,660 399,910 424,772 430,446 443,566 449,065 463,625	238,102 238,737 253,141 267,358 272,495 281,074 290,700 296,553	69,737 72,657 78,573 85,473 86,226 92,292 93,629 97,959	104,211 101,999 106,556 106,658 110,563 109,960 115,235 114,111	64,154 64,081 68,012 75,227 75,706 78,822 81,836 84,483	140,607 140,923 146,769 157,414 157,951 162,492 158,365 167,072	53,179 54,289 57,161 60,725 59,101 60,160 58,223 61,098	23,304 23,305 24,383 25,755 26,438 28,478 27,044 28,741	64,124 63,329 65,225 70,934 72,412 73,854 73,098 77,233
2000 2001 2002 2003 2004 2004 2005 2006 2006 2008	350,715 330,875 326,227 334,616 359,081 395,173 418,330 423,423 431,929	197,807 181,201 176,968 178,549 188,722 202,070 213,408 213,572 207,801	152,908 149,674 149,259 156,067 170,359 193,103 204,923 209,851 224,128	481,673 427,720 422,724 407,967 440,330 472,398 510,865 529,957 541,767	306,727 267,533 260,265 246,712 264,794 283,220 309,320 319,923 342,699	106,214 91,194 88,512 82,301 92,129 98,134 108,592 109,057 115,800	111,196 93,776 92,231 88,499 90,932 98,590 104,910 113,569 130,373	89,317 82,563 79,522 75,912 81,733 86,496 95,818 97,297 96,526	174,946 160,187 162,459 161,255 175,536 189,178 201,545 210,034 199,068	61,509 55,798 56,593 56,899 61,760 66,502 69,816 73,222 68,138	30,015 27,056 27,793 26,965 29,821 32,668 35,968 38,106 36,423	83,422 77,333 78,073 77,391 83,955 90,008 95,761 98,706 94,507
2008: Jan Feb Mar Apr June July Aug Sept Oct Nov Dec Mar Sept Sept Cot Sept Cot Sept Sept Sept Sept Sept Sept Sept Sep	439,923 434,265 439,275 448,658 449,729 457,116 440,921 429,156 412,885 384,413 373,446	215,887 212,974 212,170 214,371 213,192 212,691 214,430 206,941 206,450 198,521 190,015 189,253	224,036 221,291 227,105 234,287 236,537 240,288 242,686 233,980 222,706 214,364 194,398 184,193	537,072 541,454 546,023 547,716 550,178 554,737 558,252 561,150 559,091 556,012 551,297 541,767	321,132 323,203 326,847 329,380 331,525 333,786 336,804 339,813 340,723 341,408 341,207 342,699	109,728 110,129 111,359 112,303 112,846 115,823 116,182 116,712 116,664 116,702 115,800	114,690 116,281 118,462 120,140 121,409 122,319 123,246 124,636 125,223 126,525 127,358 130,373	96,714 96,793 97,026 96,937 97,270 97,509 97,735 98,995 98,788 98,219 97,147 96,526	215,940 218,251 219,176 218,336 218,653 220,951 221,448 221,337 218,368 214,604 210,090 199,068	75,588 75,794 75,691 75,688 76,358 76,274 76,073 75,837 76,113 74,097 71,562 68,138	40,448 41,745 41,634 40,883 42,147 41,114 42,417 42,223 41,480 39,533 38,404 36,423	99,904 100,712 101,851 101,765 100,148 103,563 102,958 103,277 100,775 100,974 100,124 94,507
2009: Jan Feb Feb Mar Apr June July Aug Sept Oct Nov P	363,750 362,685 357,240 357,324 354,190 360,117 362,269 366,882 370,294 374,174	177,696 176,094 173,884 173,480 169,672 174,982 172,366 174,914 175,345 175,747	186,054 186,591 183,356 183,844 184,750 190,445 187,629 189,903 191,968 194,949 198,427	535,486 527,872 521,501 515,642 511,305 505,009 500,593 496,549 492,559 494,397 495,143	338,475 334,112 328,422 324,569 320,714 315,984 312,367 308,133 305,056 304,023 303,120	115,240 114,345 112,272 110,135 108,234 106,139 103,840 102,920 102,367 101,161 100,262	129,265 127,694 125,769 125,256 124,856 124,091 123,880 121,442 120,306 120,971 121,261	93,970 92,073 90,381 89,178 87,624 85,754 84,647 83,771 82,383 81,891 81,597	197,011 193,760 193,079 191,073 190,591 189,025 188,226 188,416 187,503 190,374 192,023	66,897 65,599 64,949 64,050 64,106 63,838 64,118 63,832 63,632 64,548 65,850	37,221 36,648 37,122 37,212 37,160 36,685 36,454 36,872 37,166 38,065 38,465	92,893 91,513 91,008 89,811 89,325 88,502 87,654 87,712 86,705 87,761 87,708

Annual data are averages of monthly not seasonally adjusted figures.
 Seasonally adjusted, end of period. Data beginning with 1982 are not comparable with earlier data.
 Effective in 2001, data classified based on North American Industry Classification System (NAICS). Data on NAICS basis available beginning with 1992.
 Earlier data based on Standard Industrial Classification (SIC). Data on both NAICS and SIC basis include semiconductors.

TABLE B-59. Manufacturers' new and unfilled orders, 1968-2009

[Amounts in millions of dollars; monthly data seasonally adjusted]

		New o		OHS OF GOHAL		Infilled orders		Unfilled or	ders to shipm	ents ratio <sup>2</sup>
Year or month	Total	Durabli indu: Total	e goods stries Capital goods, nondefense	Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries	Total	Durable goods industries	Nondurable goods industries
SIC: <sup>3</sup> 1968 1969	50,657 53,990	28,051 29,876	6,314 7,046	22,606 24,114	108,377 114,341	104,393 110,161	3,984 4,180	3.79 3.71	4.58 4.45	0.69 .69
1970 1971 1972 1973 1974 1975 1976 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	52,022 55,921 64,182 76,003 87,327 85,139 99,513 115,109 131,629 147,604 156,329 162,140 175,451 192,879 195,704 209,389 228,270 239,572	27,340 29,905 35,038 42,627 46,862 41,957 51,307 61,035 72,278 79,483 79,392 83,654 78,064 100,164 102,364 110,809 122,076 126,055	6,072 6,682 7,745 9,926 11,594 9,886 11,490 13,681 17,588 21,154 21,154 21,154 23,669 24,454 23,982 26,094 31,108 31,988	24,682 26,016 29,144 33,376 40,485 43,181 48,206 54,073 84,371 84,077 87,311 92,715 93,351 91,557 98,579 1166,134 113,516	105,008 105,247 119,349 156,561 187,033 169,546 178,128 202,024 259,169 303,593 327,416 31,887 31,887 31,887 31,82	100,412 100,225 113,034 149,204 181,519 161,664 169,857 193,323 248,281 291,321 315,202 314,707 300,798 333,114 359,651 372,097 376,659 408,688 452,150 487,098	4,596 5,022 6,315 7,357 5,524 7,882 8,271 10,888 12,272 12,214 11,899 14,159 16,816 21,738 22,004 21,751	3.61 3.26 3.26 3.26 3.80 4.09 3.24 3.24 3.27 3.89 3.85 3.85 3.85 3.85 3.60 3.67 3.59 3.63 3.63 3.63 3.63 3.63 3.63 3.63	4.36 4.00 3.85 4.51 4.93 4.45 3.88 3.85 4.62 4.62 4.62 4.74 4.74 4.29 4.37 4.47 4.41 4.43 4.46 4.43 4.46 4.43	.76 .76 .86 .81 .62 .82 .74 .71 .82 .75 .69 .62 .69 .64 .68 .70 .83 .76
1990 1991 1992 <i>NAICS: 3</i>	244,507 238,805 248,212	125,583 119,849 126,308	33,331 30,471 31,524	118,924 118,957 121,905	531,131 519,199 492,893	509,124 495,802 469,381	22,007 23,397 23,512	4.15 4.08 3.51	5.15 5.07 4.30 5.14	.76 .79 .75
1992 1993 1994 1995 1996 1997 1998 1999	246,668 266,641 285,542 297,282 314,986 317,345 329,770 346,789	128,672 143,803 154,137 162,399 174,377 178,327 187,674 193,881	40,681 45,175 51,011 54,066 60,697 62,133 64,392 69,278			451,273 425,979 434,979 447,411 488,726 512,916 496,083 505,498 549,445			4.66 4.21 3.97 4.14 4.04 3.97 3.76	
2001	322,746 316,809 330,369 354,619 395,401 419,793 427,597 429,343	173,072 167,550 174,302 184,261 202,298 214,871 217,746 205,216	58,246 51,817 52,894 56,094 65,770 71,725 74,288 69,132			514,262 462,056 477,557 496,395 572,827 660,243 772,982 798,967			4.21 4.05 3.92 3.88 3.84 4.17 4.80 5.45	
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	442,055 438,780 445,319 449,119 450,956 454,835 455,354 436,596 425,853 400,753 374,334 357,472	218,019 217,489 218,214 214,832 214,419 214,547 212,668 202,616 203,147 186,389 179,936 173,279	75,327 74,657 75,574 73,624 73,707 70,983 72,441 67,788 66,885 62,576 60,071 54,895			780,822 790,370 801,204 807,250 813,304 819,087 822,963 823,183 823,768 816,392 810,059 798,967			5.14 5.24 5.27 5.27 5.30 5.31 5.32 5.50 5.53 5.73 5.93 5.87	
2009: Jan	345,563 347,187 341,319 343,818 348,109 350,431 356,836 353,923 360,153 363,047 365,295	159,509 160,596 157,963 159,974 163,359 159,986 169,207 164,020 168,185 168,098 166,868	49,783 49,733 49,773 48,324 52,945 57,030 52,185 54,383 55,458 53,819			784,714 772,059 759,101 749,752 747,473 740,349 739,445 735,313 732,138 729,336 724,534			6.14 6.04 6.01 6.04 6.13 5.99 5.90 5.75 5.75 5.76	

<sup>&</sup>lt;sup>1</sup> Annual data are averages of monthly not seasonally adjusted figures.

Note: For NAICS basis data beginning with 1992, because there are no unfilled orders for manufacturers' nondurable goods, manufacturers' nondurable new orders and nondurable shipments are the same (see Table B–58).

<sup>&</sup>lt;sup>2</sup> Unfilled orders are seasonally adjusted, end of period. Ratios are unfilled orders at end of period to shipments for period (excludes industries with no unfilled orders). Annual ratios relate to seasonally adjusted data for December.

<sup>3</sup> Effective in 2001, data classified based on North American Industry Classification System (NAICS). Data on NAICS basis available beginning with 1992. Earlier data based on the Standard Industrial Classification (SIC). Data on SIC basis include semiconductors. Data on NAICS basis do not include semiconductors.

#### **PRICES**

TABLE B-60. Consumer price indexes for major expenditure classes, 1965-2009

[For all urban consumers; 1982-84=100, except as noted]

Voor or month	Allitomo	Food bever		Annaral	Housing	Transpor-	Medical	Recre-	Education and	Other goods	Eporgu 3
Year or month	All items	Total <sup>1</sup>	Food	Apparel	Housing	tation	care	ation <sup>2</sup>	communi- cation <sup>2</sup>	and services	Energy <sup>3</sup>
1965 1966 1967 1968 1969	31.5 32.4 33.4 34.8 36.7	35.0 36.2 38.1	32.2 33.8 34.1 35.3 37.1	47.8 49.0 51.0 53.7 56.8	30.8 32.0 34.0	31.9 32.3 33.3 34.3 35.7	25.2 26.3 28.2 29.9 31.9			35.1 36.9 38.7	22.9 23.3 23.8 24.2 24.8
1970	38.8 40.5 41.8 44.4 49.3 53.8 56.9 60.6 65.2 72.6	40.1 41.4 43.1 48.8 55.5 60.2 62.1 65.8 72.2 79.9	39.2 40.4 42.1 48.2 55.1 59.8 61.6 65.5 72.0 79.9	59.2 61.1 62.3 64.6 69.4 72.5 75.2 78.6 81.4 84.9	36.4 38.0 39.4 41.2 45.8 50.7 53.8 57.4 62.4 70.1	37.5 39.5 39.9 41.2 45.8 50.1 55.1 59.0 61.7 70.5	34.0 36.1 37.3 38.8 42.4 47.5 52.0 57.0 61.8 67.5			40.9 42.9 44.7 46.4 49.8 53.9 57.0 60.4 64.3 68.9	25.5 26.5 27.2 29.4 38.1 42.1 45.1 49.4 52.5 65.7
1979	82.4 90.9 96.5 99.6 103.9 107.6 109.6 113.6	79.9 86.7 93.5 97.3 99.5 103.2 105.6 109.1 113.5 118.2	86.8 93.6 97.4 99.4 103.2 105.6 109.0 113.5 118.2	90.9 95.3 97.8 100.2 102.1 105.0 105.9 110.6	81.1 90.4 96.9 99.5 103.6 107.7 110.9 114.2	70.3 83.1 93.2 97.0 99.3 103.7 106.4 102.3 105.4 108.7	74.9 82.9 92.5 100.6 106.8 113.5 122.0 130.1 138.6 149.3			75.2 82.6 91.1 101.1 107.9 114.5 121.4 128.5 137.0	86.0 97.7 99.2 99.9 100.9 101.6 88.2 88.6 89.3 94.3
1989	124.0 130.7 136.2 140.3 144.5 148.2 152.4 156.9 160.5	132.1 136.8 138.7 141.6 144.9 153.7 157.7 161.1	125.1 132.4 136.3 137.9 140.9 144.3 148.4 153.3 157.3	118.6 124.1 128.7 131.9 133.7 133.4 132.0 131.7 132.9 133.0	123.0 128.5 133.6 137.5 141.2 144.8 148.5 152.8 160.4	120.5 123.8 126.5 130.4 134.3 139.1 143.0 144.3	162.8 177.0 190.1 201.4 211.0 220.5 228.2 234.6 242.1	90.7 92.7 94.5 97.4 99.6 101.1	85.5 88.8 92.2 95.3 98.4 100.3	147.7 159.0 171.6 183.3 192.9 198.5 206.9 215.4 224.8 237.7	102.1 102.5 103.0 104.2 104.6 105.2 110.1 111.5
1999	166.6 172.2 177.1 179.9 184.0 188.9 195.3 201.6 207.342 215.303 214.537	164.6 168.4 173.6 176.8 180.5 186.6 191.2 195.7 203.300 214.225 218.249	164.1 167.8 173.1 176.2 180.0 186.2 190.7 195.2 202.916 214.106 217.955	131.3 129.6 127.3 124.0 120.9 120.4 119.5 118.998 118.907 120.078	163.9 169.6 176.4 180.3 184.8 189.5 195.7 203.2 209.586 216.264 217.057	144.4 153.3 154.3 152.9 157.6 163.1 173.9 180.9 184.682 195.549 179.252	250.6 260.8 272.8 285.6 297.1 310.1 323.2 351.054 364.065 375.613	102.0 103.3 104.9 106.2 107.5 108.6 109.4 110.9 111.443 113.254 114.272	101.2 102.5 105.2 107.9 109.8 111.6 113.7 116.8 119.577 123.631 127.393	258.3 271.1 282.6 293.2 298.7 304.7 313.4 321.7 333.328 345.381 368.586	106.6 124.6 129.3 121.7 136.5 151.4 177.1 196.9 207.723 236.666 193.126
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	211.080 211.693 213.528 214.823 216.632 218.815 219.964 218.783 216.573 212.425 210.228	208.837 209.462 209.692 211.365 212.251 213.383 215.326 216.419 217.672 218.705 218.752 218.839	208.618 209.166 209.385 211.102 212.054 213.243 215.299 216.422 217.696 218.738 218.749 218.805	115.795 117.839 120.881 122.113 120.752 117.019 114.357 116.376 121.168 122.243 121.262 117.078	212.244 213.026 214.389 214.890 215.809 217.941 219.610 219.148 218.184 217.383 216.467 216.073	190.839 190.520 195.189 198.608 205.262 211.787 212.806 206.739 203.861 192.709 173.644 164.628	360.459 362.155 363.000 363.184 363.396 363.616 363.963 364.477 365.036 365.746 366.613 367.133	112.083 112.365 112.731 112.874 112.987 112.991 113.277 113.786 114.032 114.169 114.078	121.762 121.766 121.832 122.073 122.348 122.828 123.4453 124.653 125.505 125.686 125.758 125.921	339.052 340.191 341.827 343.410 344.709 345.885 346.810 346.990 348.166 349.276 349.040 349.220	219.465 219.311 230.505 240.194 257.106 275.621 280.833 266.283 258.020 231.561 189.938 171.158
2009: Jan Feb Mar Apr Apr June July Aug Sept Oct Nov Dec	211.143 212.193 212.709 213.240 213.856 215.693 215.351 215.834 215.969 216.177 216.330 215.949	219.729 219.333 218.794 218.364 218.076 218.030 217.608 217.701 217.617 217.957 217.733 218.049	219.675 219.205 218.600 218.162 217.826 217.740 217.257 217.350 217.218 217.526 217.265 217.637	114.764 118.825 122.545 123.208 121.751 118.799 115.620 117.130 122.476 123.998 122.465 119.357	216.928 217.180 217.374 217.126 216.971 218.085 217.827 217.178 216.612 215.808 215.523	166.738 169.542 169.647 171.987 175.997 183.735 182.798 184.386 183.932 185.362 188.587	369.830 372.405 373.189 374.170 375.026 375.093 375.739 376.537 377.727 378.552 379.575	113.822 114.461 114.625 114.261 114.264 114.643 114.619 114.755 114.629 114.157 113.820 113.212	126.151 126.190 126.187 126.273 126.467 126.519 126.914 128.128 129.035 129.128 128.845 128.883	350.259 351.223 361.156 370.606 369.901 370.595 372.894 372.699 374.219 375.444 376.702 377.330	174.622 178.741 177.454 179.704 186.909 205.408 201.938 204.971 202.243 199.198 204.026 202.301

Note: Data beginning with 1983 incorporate a rental equivalence measure for homeowners' costs. Series reflect changes in composition and renaming beginning in 1998, and formula and methodology changes beginning in 1999.

Source: Department of Labor (Bureau of Labor Statistics).

Includes alcoholic beverages, not shown separately.
 December 1997=100.
 Household energy—gas (piped), electricity, fuel oil, etc.—and motor fuel. Motor oil, coolant, etc. also included through 1982.

Table B-61. Consumer price indexes for selected expenditure classes, 1965-2009

[For all urban consumers; 1982–84=100, except as noted]

		Food and b	peverages					Housing			
			Food				Shelter		Fu	els and utilit	ies
Year or month	Total <sup>1</sup>	Total	At home	Away from home	Total <sup>2</sup>	Total <sup>2</sup>	Rent of primary residence	Owners' equivalent rent of primary residence <sup>3</sup>	Total <sup>2</sup>	Househo Total <sup>2</sup>	Gas (piped) and electricity
1965	35.0 36.2 38.1	32.2 33.8 34.1 35.3 37.1	33.5 35.2 35.1 36.3 38.0	28.4 29.7 31.3 32.9 34.9	30.8 32.0 34.0	27.0 27.8 28.8 30.1 32.6	40.9 41.5 42.2 43.3 44.7		26.6 26.7 27.1 27.4 28.0	21.4 21.7 22.1	23.5 23.6 23.7 23.9 24.3
1970 1971 1972 1973 1974 1975 1976 1977 1978	40.1 41.4 43.1 48.8 55.5 60.2 62.1 65.8 72.2 79.9	39.2 40.4 42.1 48.2 55.1 59.8 61.6 65.5 72.0 79.9	39.9 40.9 42.7 49.7 57.1 61.8 63.1 66.8 73.8 81.8	37.5 39.4 41.0 44.2 49.8 54.5 58.2 62.6 68.3 75.9	36.4 38.0 39.4 41.2 45.8 50.7 53.8 57.4 62.4 70.1	35.5 37.0 38.7 40.5 44.4 48.8 51.5 54.9 60.5 68.9	46.5 48.7 50.4 52.5 55.2 58.0 61.1 64.8 69.3 74.3		29.1 31.1 32.5 34.3 40.7 45.4 49.4 54.7 58.5 64.8	23.1 24.7 25.7 27.5 34.4 39.4 43.3 49.0 53.0 61.3	25.4 27.1 28.5 29.9 34.5 40.1 44.7 50.5 55.0 61.0
1980	86.7 93.5 97.3 99.5 103.2 105.6 109.1 113.5 118.2	86.8 93.6 97.4 99.4 103.2 105.6 109.0 113.5 118.2 125.1	88.4 94.8 98.1 99.1 102.8 104.3 107.3 111.9 116.6 124.2	83.4 90.9 95.8 100.0 104.2 108.3 112.5 117.0 121.8 127.4	81.1 90.4 96.9 99.5 103.6 107.7 110.9 114.2 118.5 123.0	81.0 90.5 96.9 99.1 104.0 109.8 115.8 121.3 127.1	80.9 87.9 94.6 100.1 105.3 111.8 118.3 123.1 127.8 132.8	102.5 107.3 113.2 119.4 124.8 131.1 137.4	75.4 86.4 94.9 100.2 104.8 106.5 104.1 103.0 104.4 107.8	74.8 87.2 95.6 100.5 104.0 104.5 99.2 97.3 98.0 100.9	71.4 81.9 93.2 101.5 105.4 107.1 105.7 103.8 104.6 107.5
1990 1991 1992 1993 1994 1995 1996 1997 1998	132.1 136.8 138.7 141.6 144.9 153.7 157.7 161.1 164.6	132.4 136.3 137.9 140.9 144.3 148.4 153.3 157.3 160.7 164.1	132.3 135.8 136.8 140.1 144.1 148.8 154.3 158.1 161.1	133.4 137.9 140.7 143.2 145.7 149.0 152.7 157.0 161.1 165.1	128.5 133.6 137.5 141.2 144.8 148.5 152.8 156.8 160.4 163.9	140.0 146.3 151.2 155.7 160.5 165.7 171.0 176.3 182.1 187.3	138.4 143.3 146.9 150.3 154.0 157.8 162.0 166.7 172.1	144.8 150.4 155.5 160.5 165.8 171.3 176.8 181.9	111.6 115.3 117.8 121.3 122.8 123.7 127.5 130.8 128.5 128.8	104.5 106.7 108.1 111.2 111.7 111.5 115.2 117.9 113.7	109.3 112.6 114.8 118.5 119.2 119.2 122.1 125.1 121.2
2000	168.4 173.6 176.8 180.5 186.6 191.2 195.7 203.300 214.225 218.249	167.8 173.1 176.2 180.0 186.2 190.7 195.2 202.916 214.106 217.955	167.9 173.4 175.6 179.4 186.2 189.8 193.1 201.245 214.125 215.124	169.0 173.9 178.3 182.1 187.5 193.4 199.4 206.659 215.769 223.272	169.6 176.4 180.3 184.8 189.5 195.7 203.2 209.586 216.264 217.057	193.4 200.6 208.1 213.1 218.8 224.4 232.1 240.611 246.666 249.354	183.9 192.1 199.7 205.5 211.0 217.3 225.1 234.679 243.271 248.812	198.7 206.3 214.7 219.9 224.9 230.2 238.2 246.235 252.426 256.610	137.9 150.2 143.6 154.5 161.9 179.0 194.7 200.632 220.018 210.696	122.8 135.4 127.2 138.2 144.4 161.6 177.1 181.744 200.808 188.113	128.0 142.4 134.4 145.0 150.6 166.5 182.1 186.262 202.212 193.563
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec Dec Mar	208.837 209.462 209.692 211.365 212.251 213.383 215.326 216.419 217.672 218.705 218.752 218.839	208.618 209.166 209.385 211.102 212.054 213.243 215.299 216.422 217.696 218.738 218.749 218.805	207.983 208.329 208.203 210.851 211.863 213.171 215.785 217.259 218.629 219.660 219.086 218.683	211.070 211.878 212.537 213.083 213.967 215.015 216.376 217.063 218.225 219.290 220.043 220.684	212.244 213.026 214.389 214.890 215.809 217.941 219.610 219.148 218.184 217.383 216.467 216.073	243.871 244.786 245.995 246.004 246.069 247.083 248.075 247.985 247.737 247.844 247.463 247.085	239.850 240.325 240.874 241.474 241.803 242.640 243.367 244.181 244.926 245.855 246.681 247.278	250.106 250.481 250.966 251.418 251.576 252.170 252.504 252.957 253.493 253.902 254.669 254.875	204.796 205.795 209.221 213.302 219.881 231.412 239.039 235.650 228.450 221.199 216.285 215.184	185.107 185.994 189.693 194.121 201.212 213.762 2217.742 217.455 209.501 201.176 195.599 194.335	186.475 187.376 190.105 194.379 200.999 213.375 221.805 218.656 210.950 203.503 199.435 199.487
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	219.729 219.333 218.794 218.364 218.076 218.030 217.608 217.701 217.617 217.733 218.049	219.675 219.205 218.600 218.162 217.826 217.740 217.257 217.350 217.218 217.526 217.265 217.637	219.744 218.389 217.110 215.783 215.088 214.824 213.815 213.722 213.227 213.605 212.816 213.359	221.319 221.968 222.216 222.905 223.023 223.345 223.345 223.675 224.003 224.224 224.633 224.789	216.928 217.180 217.374 217.126 216.971 218.071 218.085 217.827 217.178 216.612 215.808 215.523	248.292 248.878 249.597 249.855 249.779 250.243 250.310 250.248 249.501 249.474 248.211 247.863	247.974 248.305 248.639 249.069 249.092 248.994 249.029 248.965 248.888 248.886 248.999	255.500 255.779 256.321 256.622 256.875 256.875 256.872 257.155 256.865 256.890 256.731 256.727	215.232 213.520 210.501 207.175 206.358 212.677 212.961 211.618 207.937 208.955 208.760	194.149 192.168 188.736 184.903 183.783 190.647 190.534 189.735 188.509 184.146 185.165 184.886	199.791 197.886 194.752 190.686 189.619 196.754 196.767 194.176 188.963 189.166 188.724

 <sup>&</sup>lt;sup>1</sup> Includes alcoholic beverages, not shown separately.
 <sup>2</sup> Includes other items not shown separately.
 <sup>3</sup> December 1982=100.

See next page for continuation of table.

Table B–61. Consumer price indexes for selected expenditure classes,  $1965{-}2009{-}Continued$ 

[For all urban consumers; 1982-84=100, except as noted]

				Transportation			Medical care			
			Priva	ate transporta	tion		Public		Medical	
Year or month	Total	T . 12	New ve	ehicles	Used cars	Motor	trans- porta-	Total	care com-	Medical care
		Total <sup>2</sup>	Total <sup>2</sup>	New cars	and trucks	fuel	tion		modities	services
1965 1966 1967 1968 1969	31.9 32.3 33.3 34.3 35.7	32.5 32.9 33.8 34.8 36.0	49.8 48.9 49.3 50.7 51.5	49.7 48.8 49.3 50.7 51.5	29.8 29.0 29.9 30.9	25.1 25.6 26.4 26.8 27.6	25.2 26.1 27.4 28.7 30.9	25.2 26.3 28.2 29.9 31.9	45.0 45.1 44.9 45.0 45.4	22.7 23.9 26.0 27.9 30.2
1970	37.5 39.5 39.9 41.2 45.8 50.1 55.1 59.0 61.7 70.5	37.5 39.4 39.7 41.0 46.2 50.6 55.6 59.7 62.5 71.7	53.1 55.3 54.8 54.8 58.0 63.0 67.0 70.5 75.9 81.9	53.0 55.2 54.7 54.8 57.9 62.9 66.9 70.4 75.8 81.8	31.2 33.0 33.1 35.2 36.7 43.8 50.3 54.7 55.8 60.2	27.9 28.1 28.4 31.2 42.2 45.1 47.0 49.7 51.8 70.1	35.2 37.8 39.3 39.7 40.6 43.5 47.8 50.0 51.5 54.9	34.0 36.1 37.3 38.8 42.4 47.5 52.0 57.0 61.8 67.5	46.5 47.3 47.4 47.5 49.2 53.3 56.5 60.2 64.4 69.0	32.3 34.7 35.9 37.5 41.4 46.6 51.3 56.4 61.2 67.2
1980 1981 1982 1983 1984 1985 1986 1987 1988	83.1 93.2 97.0 99.3 103.7 106.4 102.3 105.4 108.7 114.1	84.2 93.8 97.1 99.3 103.6 106.2 101.2 104.2 107.6 112.9	88.5 93.9 97.5 99.9 102.6 106.1 110.6 114.4 116.5 119.2	88.4 93.7 97.4 99.9 102.8 106.1 110.6 114.6 116.9	62.3 76.9 88.8 98.7 112.5 113.7 108.8 113.1 118.0 120.4	97.4 108.5 102.8 99.4 97.9 98.7 77.1 80.2 80.9 88.5	69.0 85.6 94.9 99.5 105.7 110.5 117.0 121.1 123.3 129.5	74.9 82.9 92.5 100.6 106.8 113.5 122.0 130.1 138.6 149.3	75.4 83.7 92.3 100.2 107.5 115.2 122.8 131.0 139.9 150.8	74.8 82.8 92.6 100.7 106.7 113.2 121.9 130.0 138.3 148.9
1990	120.5 123.8 126.5 130.4 134.3 139.1 143.0 144.3 141.6	118.8 121.9 124.6 127.5 131.4 136.3 140.0 141.0 137.9 140.5	121.4 126.0 129.2 132.7 137.6 141.0 143.7 144.3 143.4	121.0 125.3 128.4 131.5 136.0 139.0 141.4 141.7 140.7	117.6 118.1 123.2 133.9 141.7 156.5 157.0 151.1 150.6	101.2 99.4 99.0 98.0 98.5 100.0 106.3 106.2 92.2	142.6 148.9 151.4 167.0 172.0 175.9 181.9 186.7 190.3	162.8 177.0 190.1 201.4 211.0 220.5 228.2 234.6 242.1 250.6	163.4 176.8 188.1 195.0 200.7 204.5 210.4 215.3 221.8 230.7	162.7 177.1 190.5 202.9 213.4 224.2 232.4 239.1 246.8 255.1
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2009	153.3 154.3 152.9 157.6 163.1 173.9 180.9 184.682 195.549 179.252	149.1 150.0 148.8 153.6 159.4 170.2 177.0 180.778 191.039 174.762	142.8 142.1 140.0 137.9 137.1 137.9 137.6 136.254 134.194 135.623	139.6 138.9 137.3 134.7 133.9 135.2 136.4 135.801 135.401 136.685	155.8 158.7 152.0 142.9 133.3 139.4 140.0 135.747 133.951 126.973	129.3 124.7 116.6 135.8 160.4 195.7 221.0 239.070 279.652 201.978	209.6 210.6 207.4 209.3 209.1 217.3 226.6 230.002 250.549 236.348	260.8 272.8 285.6 297.1 310.1 323.2 336.2 351.054 364.065 375.613	238.1 247.6 256.4 262.8 269.3 276.0 285.99 289.999 296.045 305.108	266.0 278.8 292.9 306.0 321.3 336.7 350.6 369.302 384.943 397.299
2008: Jan	190.839 190.520 195.189 198.608 205.262 211.787 212.806 206.739 203.861 192.709 173.644 164.628	186.978 186.571 191.067 194.574 201.133 207.257 208.038 201.779 199.153 187.976 168.527 159.411	136.827 136.279 135.727 135.175 134.669 134.516 134.397 133.404 132.399 132.264 132.359 132.308	136.363 136.009 135.645 135.329 135.144 135.235 135.800 135.481 134.934 134.837 135.041 134.930	137.203 137.248 137.225 136.787 136.325 135.980 135.840 135.405 132.916 129.733 126.869 125.883	260.523 259.242 278.739 294.291 322.124 347.418 349.731 323.822 315.078 268.537 187.189 149.132	234.334 235.724 242.929 244.164 251.600 264.681 270.002 268.487 261.318 252.323 243.385 237.638 234.394	360.459 362.155 363.000 363.184 363.396 363.616 363.963 364.477 365.036 365.746 366.613 367.133	295.355 296.130 297.308 296.951 294.896 295.194 294.777 295.003 295.461 297.317 298.361 299.998	380.135 382.196 382.872 383.292 384.505 384.685 385.361 385.990 386.579 387.440 387.992 388.267
Feb	169,542 169,647 171,987 175,997 183,735 182,798 184,386 183,932 185,362 188,587 188,318	164.871 165.023 167.516 171.757 179.649 178.330 179.987 179.466 180.896 184.099	134.186 134.611 134.863 135.162 135.719 136.055 134.080 134.576 137.268 138.831 138.857	135.984 135.947 136.037 136.172 136.486 136.844 134.666 135.041 137.851 139.821 139.728	124,803 122,837 121,061 121,213 122,650 124,323 125,061 128,028 129,369 132,689 134,173 137,406	167.395 168.404 177.272 193.609 225.021 217.860 225.089 220.690 219.015 228.050 224.730	231.529 230.735 229.827 228.878 232.540 238.932 238.997 239.855 241.060 244.226 245.203	372.405 373.189 374.170 375.026 375.093 375.739 376.537 377.727 378.552 379.575	302.908 302.908 303.979 304.697 304.683 304.229 305.797 307.671 308.379 308.546 308.221	394.047 394.837 395.753 396.648 396.750 397.868 398.303 399.160 400.015 401.392 401.452

Source: Department of Labor (Bureau of Labor Statistics).

TABLE B-62. Consumer price indexes for commodities, services, and special groups, 1965-2009

[For all urban consumers; 1982-84=100, except as noted]

	Commodities					Special	indexes			All items	
Year or month	All items (CPI-U) <sup>1</sup>	All com- modities	Com- modities less food	Services	All items less food	All items less energy	All items less food and energy	All items less medical care	CPI-U-X1 (Dec. 1982 = 97.6) <sup>2</sup>	CPI-U-RS (Dec. 1977 = 100) <sup>3</sup>	C-CPI-U (Dec. 1999 = 100) 4
1965 1966 1967 1968	31.5 32.4 33.4 34.8 36.7	35.2 36.1 36.8 38.1 39.9	37.2 37.7 38.6 40.0 41.7	26.6 27.6 28.8 30.3 32.4	31.6 32.3 33.4 34.9 36.8	32.5 33.5 34.4 35.9 38.0	32.7 33.5 34.7 36.3 38.4	32.0 33.0 33.7 35.1 37.0	34.2 35.2 36.3 37.7 39.4		
1970	38.8 40.5 41.8 44.4 49.3 53.8 56.9 60.6 65.2 72.6	41.7 43.2 44.5 47.8 53.5 58.2 60.7 64.2 68.8 76.6	43.4 45.1 46.1 47.7 52.8 57.6 60.5 63.8 67.5 75.3	35.0 37.0 38.4 40.1 43.8 48.0 52.0 56.0 60.8 67.5	39.0 40.8 42.0 43.7 48.0 52.5 56.0 59.6 63.9 71.2	40.3 42.0 43.4 46.1 50.6 55.1 58.2 61.9 66.7 73.4	40.8 42.7 44.0 45.6 49.4 53.9 57.4 61.0 65.5 71.9	39.2 40.8 42.1 44.8 49.8 54.3 57.2 60.8 65.4 72.9	41.3 43.1 44.4 47.2 51.9 56.2 59.4 63.2 67.5 74.0	104.4	
1980	82.4 90.9 96.5 99.6 103.9 107.6 109.6 113.6 118.3	86.0 93.2 97.0 99.8 103.2 105.4 104.4 107.7 111.5 116.7	85.7 93.1 96.9 100.0 103.1 105.2 101.7 104.3 107.7 112.0	77.9 88.1 96.0 99.4 104.6 109.9 115.4 120.2 125.7 131.9	81.5 90.4 96.3 99.7 104.0 108.0 109.8 113.6 118.3 123.7	81.9 90.1 96.1 99.6 104.3 108.4 112.6 117.2 122.3 128.1	80.8 89.2 95.8 99.6 104.6 109.1 113.5 118.2 123.4 129.0	82.8 91.4 96.8 99.6 103.7 107.2 108.8 112.6 117.0 122.4	82.3 90.1 95.6 99.6 103.9 107.6 113.6 118.3 124.0	127.1 139.2 147.6 153.9 160.2 165.7 168.7 174.4 180.8 188.6	
1990 1991 1992 1993 1994 1995 1996 1997 1998	130.7 136.2 140.3 144.5 148.2 152.4 156.9 160.5 163.0	122.8 126.6 129.1 131.5 133.8 136.4 139.9 141.8 141.9	117.4 121.3 124.2 126.3 127.9 129.8 132.6 133.4 132.0 134.0	139.2 146.3 152.0 157.9 163.1 168.7 174.1 179.4 184.2 188.8	130.3 136.1 140.8 145.1 149.0 153.1 157.5 161.1 163.4 167.0	134.7 140.9 145.4 150.0 154.1 158.7 163.1 167.1 170.9 174.4	135.5 142.1 147.3 152.2 156.5 161.2 165.6 169.5 173.4 177.0	128.8 133.8 137.5 141.2 144.7 148.6 152.8 156.3 158.6 162.0	130.7 136.2 140.3 144.5 148.2 152.4 156.9 160.5 163.0 166.6	198.0 205.1 210.3 215.5 220.1 225.4 231.4 236.4 239.7 244.7	
2000	172.2 177.1 179.9 184.0 188.9 195.3 201.6 207.342 215.303 214.537	149.2 150.7 149.7 151.2 154.7 160.2 164.0 167.509 174.764 169.698	139.2 138.9 136.0 136.5 138.8 144.5 148.0 149.720 155.310 147.071	195.3 203.4 209.8 216.5 222.8 230.1 238.9 246.848 255.498 259.154	173.0 177.8 180.5 184.7 189.4 196.0 202.7 208.098 215.528 214.008	178.6 183.5 187.7 190.6 194.4 198.7 203.7 208.925 214.751 218.433	181.3 186.1 190.5 193.2 196.6 200.9 205.9 210.729 215.572 219.235	167.3 171.9 174.3 178.1 182.7 188.7 194.7 200.080 207.777 206.555	172.2 177.1 179.9 184.0 188.9 195.3 201.6 207.342 215.303 214.537	252.9 260.0 264.2 270.1 277.4 286.7 296.1 304.5 316.2 315.0	102.0 104.3 105.6 107.8 110.5 113.7 117.0 119.957 123.880
2008: Jan	211.080 211.693 213.528 214.823 216.632 218.815 219.964 218.783 216.573 212.425 210.228	171.179 171.530 173.884 175.838 178.341 180.534 181.087 179.148 179.117 175.257 167.673 163.582	152.531 152.799 155.881 157.870 160.880 163.385 163.364 160.341 159.825 154.250 144.055 138.536	250.648 251.527 252.817 253.426 254.509 256.668 258.422 258.638 258.059 257.559 256.967 256.731	211.512 212.136 214.236 215.462 217.411 219.757 220.758 219.552 218.991 216.250 211.421 208.855	211.846 212.545 213.420 213.851 214.101 214.600 215.335 215.873 216.695 216.417 215.930	213.138 213.866 214.866 215.059 215.180 215.553 216.045 216.476 216.862 217.023 216.690 216.100	203.569 204.136 205.992 207.317 209.170 211.408 212.576 211.653 211.321 209.021 204.721 202.442	211.080 211.693 213.528 214.823 216.632 218.815 219.964 219.086 218.783 216.573 212.425 210.228	310.0 310.9 313.6 315.5 318.1 321.3 323.0 321.7 321.3 318.0 311.9	121.868 122.224 123.177 123.817 124.617 125.554 126.088 125.815 125.746 124.757 122.257
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	211.143 212.193 212.709 213.240 213.856 215.693 215.351 215.834 215.969 216.177 216.330 215.949	164.360 165.891 166.645 167.816 169.060 171.593 170.483 171.081 171.559 172.252 173.061 172.572	139.258 141.491 142.728 144.464 146.261 149.697 148.386 149.155 149.846 150.663 151.847 151.052	257.780 258.328 258.597 258.466 258.433 259.544 259.992 260.355 260.136 259.844 259.323 259.055	209.777 211.076 211.775 212.464 213.236 215.389 215.069 215.617 215.795 215.986 216.207 215.703	216.586 217.325 218.033 218.388 218.323 218.440 218.421 218.642 219.076 219.624 219.291 219.048	216.719 217.685 218.639 219.143 219.128 219.283 219.350 219.596 220.137 220.731 220.384 220.025	203.281 204.265 204.766 205.275 205.876 207.764 207.388 207.855 207.949 208.131 208.250 207.860	211.143 212.193 212.709 213.240 213.856 215.693 215.351 215.834 215.969 216.177 216.330 215.949	310.1 311.6 312.4 313.1 314.0 316.7 316.2 316.9 317.1 317.5 317.7	121.208 121.901 122.182 122.506 122.898 123.967 123.711 123.955 124.021 124.179 124.231 123.965

Consumer price index, all urban consumers.
 CPI-U-X1 reflects a rental equivalence approach to homeowners' costs for the CPI-U for years prior to 1983, the first year for which the official index incorporates such a measure. CPI-U-X1 is rebased to the December 1982 value of the CPI-U f1982–84–100) and is identical with CPI-U data from December 1982 forward. Data prior to 1967 estimated by moving the series at the same rate as the CPI-U for each year.

<sup>3</sup> Consumer price index research series (CPI-U-RS) using current methods introduced in June 1999. Data for 2009 are preliminary. All data are subject to revision annually.

4 Chained consumer price index (C-CPI-U) introduced in August 2002. Data for 2008 and 2009 are subject to revision.

Source: Department of Labor (Bureau of Labor Statistics).

Table B-63. Changes in special consumer price indexes, 1965-2009

[For all urban consumers; percent change]

1966		All it	tems	All iten		All iten ene		All iten food and			ns less al care
1966	Year or month	to									
1971	1966	3.5 3.0 4.7	2.9 3.1 4.2	3.5 3.3 5.0	2.2 3.4 4.5	3.4 3.2 4.9	3.1 2.7 4.4	3.3 3.8 5.1	2.4 3.6 4.6	3.4 2.7 4.7	1.6 3.1 2.1 4.2 5.4
1881         89         10.3         9.8         10.9         8.5         10.0         9.5         10.4         8.8         10.5           1982         3.8         3.2         4.1         6.5         4.2         6.7         4.5         7.4         3.6         5.           1983         3.8         3.2         4.1         3.5         4.5         3.6         4.8         4.0         3.6         2.           1984         3.9         4.3         3.9         4.3         4.4         4.7         4.7         5.0         3.9         4.3         3.8         3.6         4.1         3.8         4.0         2.7         3.0         3.9         4.3         4.3         4.3         3.5         3.3         3.8         4.0         7.7         1.1         1.9         5.         1.7         3.8         3.9         4.3         4.3         3.5         3.3         3.8         4.0         7         1.1         1.9         5.         1.7         3.8         3.9         3.8         4.0         7         1.1         1.9         5.         1.7         3.8         3.9         3.8         4.0         7         1.1         4.2         4.1	1971 1972 1973 1974 1975 1976 1976 1977	3.3 3.4 8.7 12.3 6.9 4.9 6.7 9.0	4.4 3.2 6.2 11.0 9.1 5.8 6.5 7.6	3.0 2.9 5.6 12.2 7.3 6.1 6.4 8.3	4.6 2.9 4.0 9.8 9.4 6.7 6.4 7.2	3.4 3.5 8.2 11.7 6.6 4.8 6.7 9.1	4.2 3.3 6.2 9.8 8.9 5.6 6.4 7.8	3.1 3.0 4.7 11.1 6.7 6.1 6.5 8.5	4.7 3.0 3.6 8.3 9.1 6.5 6.3 7.4	3.2 3.4 9.1 12.2 6.7 4.5 6.7 9.1	5.9 4.1 3.2 6.4 11.2 9.0 5.3 6.3 7.6 11.5
1990         6.1         5.4         6.3         5.3         5.2         5.2         5.2         5.0         5.9         5.9           1991         3.1         4.2         3.3         4.5         3.9         4.6         4.4         4.9         2.7         2.1           1992         2.9         3.0         3.2         3.5         3.0         3.2         3.3         3.7         2.7         2.2           1993         2.7         2.6         2.6         2.7         2.6         2.6         2.7         2.6         2.8         2.5         2.8         2.5         2.8         2.7         2.8         2.9         3.0         3.0         3.0         3.0         3.0         2.5         2.2         2.9         1.9         2.8         2.5         2.2         2.9         2.8         2.6         2.7         2.6         2.8         2.5         2.2         2.9         2.8         2.6         2.7         2.6         2.8         2.5         2.2         2.9         2.8         2.6         2.7         3.3         2.9         2.9         2.8         2.6         2.7         3.3         2.2         2.2         2.4         1.6         2.6	1981 1982 1983 1984 1985 1986 1986 1987	8.9 3.8 3.9 3.8 1.1 4.4 4.4	10.3 6.2 3.2 4.3 3.6 1.9 3.6 4.1	9.8 4.1 4.1 3.9 4.1 .5 4.6 4.2	10.9 6.5 3.5 4.3 3.8 1.7 3.5 4.1	8.5 4.2 4.5 4.4 4.0 3.8 4.1 4.7	10.0 6.7 3.6 4.7 3.9 3.9 4.1 4.4	9.5 4.5 4.8 4.7 4.3 3.8 4.2 4.7	10.4 7.4 4.0 5.0 4.3 4.0 4.1 4.4	8.8 3.6 3.9 3.5 .7 4.3 4.2	13.6 10.4 5.9 2.9 4.1 3.4 1.5 3.5 4.6
2001         1.6         2.8         1.3         2.8         2.8         2.7         2.7         2.6         1.4         2.2           2002         2.4         1.6         2.6         1.5         1.8         2.3         1.9         2.4         2.2         1.2           2003         1.9         2.3         1.5         2.3         1.5         1.5         1.1         1.4         1.8         2.2           2004         3.3         2.7         3.4         2.5         2.2         2.0         2.2         1.8         3.2         2.           2005         3.4         3.4         3.6         3.5         2.2	1990 1991 1992 1993 1994 1995 1996 1997	3.1 2.9 2.7 2.7 2.5 3.3 1.7 1.6	4.2 3.0 3.0 2.6 2.8 3.0 2.3 1.6	3.3 3.2 2.7 2.6 2.7 3.1 1.8 1.5	4.5 3.5 3.1 2.7 2.8 2.9 2.3 1.4	3.9 3.1 2.6 2.9 2.1 2.1	4.6 3.2 3.2 2.7 3.0 2.8 2.5 2.3	4.4 3.3 3.2 2.6 3.0 2.6 2.2 2.4	4.9 3.7 3.3 2.8 3.0 2.7 2.4 2.3	2.7 2.7 2.6 2.5 2.5 3.3 1.6 1.5	5.2 3.9 2.8 2.7 2.5 2.7 2.8 2.3 1.5 2.1
Percent change from preceding month	2001 2002 2003 2004 2005 2006 2007 2007 2008	1.6 2.4 1.9 3.3 3.4 2.5 4.1	2.8 1.6 2.3 2.7 3.4 3.2 2.8 3.8	1.3 2.6 1.5 3.4 3.6 2.6 4.0 8	2.8 1.5 2.3 2.5 3.5 3.4 2.7 3.6	2.8 1.8 1.5 2.2 2.2 2.5 2.8 2.4	2.7 2.3 1.5 2.0 2.2 2.5 2.6 2.8	2.7 1.9 1.1 2.2 2.2 2.6 2.4 1.8	2.6 2.4 1.4 1.8 2.2 2.5 2.3 2.3	1.4 2.2 1.8 3.2 3.3 2.5 4.0 1	3.3 2.7 1.4 2.2 2.6 3.3 3.2 2.8 3.8 6
		Percent change from preceding month									

		recent change from preceding month												
	Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted	Unad- justed	Seasonally adjusted				
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	3 9 6 8 1.0 5 -4 -1 -1.0 -1.0	0.4 .2 .4 .2 .5 .9 .7 .0 -8 -1.7 -8	0.4 3 1.0 6 .9 1.1 .5 5 3 -1.3 -2.2	0.3 .1 .4 .0 .5 1.0 .7 -1 .0 -1.0 -2.0 -9	0.5 .3 .4 .2 .1 .2 .3 .2 .2 .1 1	0.3 .1 .2 .2 .2 .3 .4 .2 .2 .1 .1	0.4 .3 .5 .1 .1 .2 .2 .2 .2 .2 .1 2 3	0.3 .1 .2 .1 .2 .3 .3 .2 .1 .0	0.5 .3 .9 .6 .9 1.1 .6 4 2 -1.1 -2.1	0.3 .2 .4 .2 .5 1.0 .8 .0 .0 -9 -1.8				
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec Dec	.5 .2 .2 .3 .9 2 .2 .1 .1	3 .4 1 .0 .1 .7 .0 .4 .2 .3 .4 .1	.4 .6 .3 .3 .4 1.0 -1 .1 .1 .1 .1	351029052351	.3 .3 .2 .0 .1 .0 .1 .2 .3 2	.2 .1 .1 .2 .1 .2 .0 .1 .1 .2 .0	.3 .4 .4 .2 .0 .1 .0 .1 .2 .3 2 2	.2 .2 .2 .3 .1 .2 .1 .1 .2 .2 .2 .0	.4 .5 .2 .2 .3 .9 2 .2 .0 .1 .1	.3 .4 2 .0 .1 .8 .0 .5 .2 .3 .4				

<sup>&</sup>lt;sup>1</sup> Changes from December to December are based on unadjusted indexes. Source: Department of Labor (Bureau of Labor Statistics).

Table B-64. Changes in consumer price indexes for commodities and services, 1933-2009 [For all urban consumers: percent change]

	All it	tems	Commodities			ю. рого		rices		Medica	I care <sup>2</sup>	Ene	rgy <sup>3</sup>	
V	-		Tot	tal	Fo	od	To	tal	Medica	al care	-	.,	_	.,
Year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. 1	Year to year	Dec. to Dec. 1	Year to year	Dec. to Dec. <sup>1</sup>	Year to year
1933	0.8	-5.1			6.9	-2.8								
1939 1940	.0 .7	-1.4 .7	-0.7 1.4	-2.0 .7	-2.5 2.5	-2.5 1.7	0.0	0.0 8.	1.2 .0	1.2 .0	1.0	0.0 1.0		
1941 1942	9.9 9.0	5.0 10.9	13.3 12.9	6.7 14.5	15.7 17.9	9.2 17.6	2.4 2.3	.8 3.1	1.2 3.5	.0 3.5	1.0 3.8	.0 2.9		
1943 1944	3.0 2.3	6.1 1.7	4.2 2.0	9.3 1.0	3.0	11.0 -1.2	2.3 2.2	2.3 2.2	5.6 3.2	4.5 4.3	4.6 2.6	4.7 3.6		
1945 1946 1947	2.2 18.1 8.8	2.3 8.3 14.4	2.9 24.8 10.3	3.0 10.6 20.5	3.5 31.3 11.3	2.4 14.5 21.7	.7 3.6 5.6	1.5 1.4 4.3	3.1 9.0 6.4	3.1 5.1 8.7	2.6 8.3 6.9	2.6 5.0 8.0		
1948 1949	3.0 -2.1	8.1 -1.2	1.7 -4.1	7.2 -2.7	8 -3.9	8.3 -4.2	5.9 3.7	6.1 5.1	6.9 1.6	7.1 3.3	5.8 1.4	6.7 2.8		
1950 1951	5.9 6.0	1.3 7.9	7.8 5.9	.7 9.0	9.8 7.1	1.6	3.6 5.2	3.0 5.3	4.0 5.3	2.4 4.7	3.4 5.8	2.0 5.3		
1952 1953	.8	1.9	9 3	1.3 3	-1.0 -1.1	1.8 -1.4	4.4 4.2	4.5 4.3	5.8 3.4	6.7 3.5	4.3	5.0 3.6		
1954 1955	7 .4	.7 4	-1.6 3	9 9	-1.8 7	4 -1.4	2.0 2.0	3.1 2.0	2.6 3.2	3.4 2.6	3.5 2.3 3.3	2.9 2.2		
1956 1957	3.0 2.9 1.8	1.5 3.3	2.6 2.8 1.2	1.0 3.2 2.1	2.9 2.8 2.4	.7 3.2	3.4 4.2 2.7	2.5 4.3	3.8 4.8	3.8 4.3	3.2 4.7	3.8 4.2		
1958 1959	1.7	2.8	.6	.0	-1.0	4.5 -1.7	3.9	3.7 3.1	4.6 4.9	5.3 4.5	4.5 3.8	4.6 4.4	-0.9 4.7	0.0 1.9
1960 1961 1962	1.4 .7 1.3	1.7 1.0 1.0	1.2 .0 .9	.9 .6 .9	3.1 7 1.3	1.0 1.3 .7	2.5 2.1 1.6	3.4 1.7 2.0	3.7 3.5 2.9	4.3 3.6 3.5	3.2 3.1 2.2	3.7 2.7 2.6	1.3 -1.3 2.2	2.3 .4 .4
1963 1964	1.6 1.0	1.3 1.3	1.5 .9	.9 1.2	2.0 1.3	1.6 1.3	2.4 1.6	2.0 2.0 2.0	2.8 2.3	2.9 2.3	2.5 2.1	2.6 2.1	9 .0	.0 4
1965 1966	1.9	1.6 2.9	1.4 2.5	1.1	3.5 4.0	2.2 5.0	2.7 4.8	2.3 3.8	3.6 8.3	3.2 5.3	2.8 6.7	2.4 4.4	1.8 1.7	1.8 1.7
1967 1968	3.0 4.7	3.1 4.2	2.5 4.0	1.9 3.5	1.2 4.4	.9 3.5	4.3 5.8	4.3 5.2	8.0 7.1	8.8 7.3	6.3 6.2	7.2 6.0	1.7 1.7	2.1 1.7
1969 1970	6.2 5.6	5.5 5.7	5.4 3.9	4.7 4.5	7.0 2.3	5.1 5.7	7.7 8.1	6.9 8.0	7.3 8.1	8.2 7.0	6.2 7.4	6.7 6.6	2.9 4.8	2.5 2.8
1971 1972 1973	3.3 3.4 8.7	4.4 3.2 6.2	2.8 3.4 10.4	3.6 3.0 7.4	4.3 4.6 20.3	3.1 4.2 14.5	4.1 3.4 6.2	5.7 3.8 4.4	5.4 3.7 6.0	7.4 3.5 4.5	4.6 3.3 5.3	6.2 3.3 4.0	3.1 2.6 17.0	3.9 2.6 8.1
1974 1975	12.3 6.9	11.0 9.1	12.8 6.2	11.9 8.8	12.0 6.6	14.3 14.3 8.5	11.4 8.2	9.2 9.6	13.2 10.3	10.4 12.6	12.6 9.8	9.3 12.0	21.6 11.4	29.6 10.5
1976 1977	4.9 6.7	5.8 6.5	3.3 6.1	4.3 5.8	.5 8.1	3.0 6.3	7.2 8.0	8.3 7.7	10.8	10.1	10.0	9.5 9.6	7.1 7.2	7.1 9.5
1978 1979	9.0 13.3	7.6 11.3	8.8 13.0	7.2 11.3	11.8 10.2	9.9 11.0	9.3 13.6	8.6 11.0	9.3 10.5	8.5 9.8	8.8 10.1	8.4 9.2	7.9 37.5	6.3 25.1
1980 1981	12.5 8.9	13.5 10.3	11.0 6.0	12.3 8.4	10.2 4.3	8.6 7.8	14.2 13.0	15.4 13.1	10.1 12.6	11.3 10.7	9.9 12.5	11.0 10.7	18.0 11.9	30.9 13.6
1982	3.8 3.8	6.2 3.2	3.6 2.9	4.1 2.9	3.1 2.7	4.1 2.1	4.3 4.8	9.0 3.5	11.2 6.2	11.8 8.7	11.0 6.4	11.6 8.8	1.3	1.5 .7
1984 1985 1986	3.9 3.8 1.1	4.3 3.6 1.9	2.7 2.5 –2.0	3.4 2.1 9	3.8 2.6 3.8	3.8 2.3 3.2	5.4 5.1 4.5	5.2 5.1 5.0	5.8 6.8 7.9	6.0 6.1 7.7	6.1 6.8 7.7	6.2 6.3 7.5	1.8 -19.7	1.0 .7 –13.2
1987 1988	4.4 4.4	3.6 4.1	4.6 3.8	3.2 3.5	3.5 5.2	4.1 4.1	4.3 4.8	4.2 4.6	5.6 6.9	6.6 6.4	5.8 6.9	6.6 6.5	8.2 .5	.5 .8 5.6
1989 1990	4.6 6.1	4.8 5.4	4.1 6.6	4.7 5.2	5.6 5.3	5.8 5.8	5.1 5.7	4.9 5.5	8.6 9.9	7.7 9.3	8.5 9.6	7.7 9.0	5.1 18.1	8.3
1991 1992	3.1 2.9	4.2 3.0	1.2 2.0	3.1 2.0	1.9 1.5	2.9 1.2	4.6 3.6	5.1 3.9	8.0 7.0	8.9 7.6	7.9 6.6	8.7 7.4	-7.4 2.0	.4 .5 1.2
1993	2.7 2.7	3.0 2.6	1.5 2.3	1.9 1.7	2.9 2.9	2.2 2.4	3.8 2.9	3.9 3.3	5.9 5.4	6.5 5.2	5.4 4.9	5.9 4.8	-1.4 2.2	1.2 .4 .6
1995 1996	2.5 3.3	2.8 3.0	1.4 3.2	1.9 2.6	2.1 4.3	2.8 3.3	3.5 3.3 2.8	3.4	4.4 3.2	5.1 3.7	3.9 3.0	4.5 3.5	-1.3 8.6	4.7
1997 1998 1999	1.7 1.6 2.7	2.3 1.6 2.2	.2 .4 2.7	1.4 .1 1.8	1.5 2.3 1.9	2.6 2.2 2.1	2.6 2.6 2.6	3.0 2.7 2.5	2.9 3.2 3.6	2.9 3.2 3.4	2.8 3.4 3.7	2.8 3.2 3.5	-3.4 -8.8 13.4	1.3 -7.7 3.6
2000	3.4 1.6	3.4 2.8	2.7 -1.4	3.3 1.0	2.8 2.8	2.3	3.9 3.7	3.4 4.1	4.6 4.8	4.3 4.8	4.2 4.7	4.1 4.6	14.2 -13.0	
2002	2.4 1.9	1.6 2.3	1.2	7 1.0	1.5 3.6	1.8 2.2	3.2 2.8	3.1 3.2	5.6 4.2	5.1 4.5	5.0 3.7	4.0 4.7 4.0	10.7 6.9	-5.9 12.2
2004 2005	3.3 3.4	2.7 3.4	3.6 2.7	2.3 3.6 2.4	2.7 2.3 2.1	3.4 2.4	3.1 3.8 3.4 3.3	2.9 3.3	4.9 4.5	5.0 4.8	4.2 4.3	4.4 4.2	16.6 17.1	10.9 17.0
2006 2007	2.5 4.1	3.2 2.8	1.3 5.2	2.1	4.9	2.4 4.0	3.4	3.8 3.3	4.1 5.9	4.1 5.3	3.6 5.2	4.0 4.4	2.9 17.4	16.9 3.8 -5.9 12.2 10.9 17.0 11.2 5.5 13.9
2008	.1 2.7	3.8 4	-4.1 5.5	4.3 -2.9	5.9 5	5.5 1.8	3.0 .9	3.5 1.4	3.0 3.4	4.2 3.2	2.6 3.4	3.7 3.2	-21.3 18.2	13.9 -18.4

Source: Department of Labor (Bureau of Labor Statistics).

<sup>1</sup> Changes from December to December are based on unadjusted indexes.
2 Commodities and services.
3 Household energy—gas (piped), electricity, fuel oil, etc.—and motor fuel. Motor oil, coolant, etc. also included through 1982.

Table B-65. Producer price indexes by stage of processing, 1965-2009 [1982=100]

					Finishe	d goods				
V 11		C	onsumer food	ls		Finished good	s excluding co	onsumer foods	.	Total
Year or month	Total finished goods	Total	Crude	Processed	Total	C	onsumer good	ds	Capital	finished consumer
	goods	IUldi	Crude	riocesseu	IUldi	Total	Durable	Nondurable	equipment	goods
1965	34.1	36.8	39.0	36.8		33.6	43.2	28.8	33.8	34.2
1966 1967	35.2 35.6	39.2 38.5	41.5 39.6	39.2 38.8	35.0	34.1 34.7	43.4 44.1	29.3 30.0	34.6 35.8	35.4 35.6
1968 1969	36.6 38.0	40.0 42.4	42.5 45.9	40.0 42.3	35.9 36.9	35.5 36.3	45.1 45.9	30.6 31.5	37.0 38.3	36.5 37.9
1970	39.3	43.8	46.0	42.3	38.2	37.4	45.9	32.5	40.1	37.9
1971	40.5	44.5	45.8	44.7	39.6	38.7	48.9	33.5	41.7	40.2
1972 1973	41.8 45.6	46.9 56.5	48.0 63.6	47.2 55.8	40.4 42.0	39.4 41.2	50.0 50.9	34.1 36.1	42.8 44.2	41.5 46.0
1974	52.6	64.4	71.6	63.9	48.8	48.2	55.5	44.0	50.5	53.1
1975	58.2 60.8	69.8 69.6	71.7 76.7	70.3 69.0	54.7 58.1	53.2 56.5	61.0 63.7	48.9 52.4	58.2 62.1	58.2 60.4
1977 1	64.7	73.3	79.5	72.7	62.2	60.6	67.4	56.8	66.1	64.3
1978 1979	69.8 77.6	79.9 87.3	85.8 92.3	79.4 86.8	66.7 74.6	64.9 73.5	73.6 80.8	60.0 69.3	71.3 77.5	69.4 77.5
1980	88.0	92.4	93.9	92.3	86.7	87.1	91.0	85.1	85.8	88.6
1981 1982	96.1 100.0	97.8 100.0	104.4 100.0	97.2 100.0	95.6 100.0	96.1 100.0	96.4 100.0	95.8 100.0	94.6 100.0	96.6 100.0
1983	101.6	101.0	102.4	100.9	101.8	101.2	102.8	100.5	102.8	101.3
1984	103.7 104.7	105.4 104.6	111.4 102.9	104.9 104.8	103.2 104.6	102.2 103.3	104.5 106.5	101.1 101.7	105.2 107.5	103.3 103.8
1985 1986	103.2	107.3	105.6	107.4	101.9	98.5	108.9	93.3	109.7	101.4
1987 1988	105.4 108.0	109.5 112.6	107.1 109.8	109.6 112.7	104.0 106.5	100.7 103.1	111.5 113.8	94.9 97.3	111.7 114.3	103.6 106.2
1989	113.6	118.7	119.6	118.6	111.8	108.9	117.6	103.8	118.8	112.1
1990	119.2	124.4	123.0	124.4	117.4	115.3	120.4	111.5	122.9	118.2
1991 1992	121.7 123.2	124.1 123.3	119.3 107.6	124.4 124.4	120.9 123.1	118.7 120.8	123.9 125.7	115.0 117.3	126.7 129.1	120.5 121.7
1993	124.7	125.7 126.8	114.4 111.3	126.5 127.9	124.4	121.7	128.0 130.9	117.6 116.2	131.4	123.0
1994 1995	125.5 127.9	129.0	118.8	129.8	125.1 127.5	121.6 124.0	132.7	118.8	134.1 136.7	123.3 125.6
1996	131.3 131.8	133.6 134.5	129.2 126.6	133.8 135.1	130.5 130.9	127.6 128.2	134.2 133.7	123.3 124.3	138.3 138.2	129.5 130.2
1997 1998	130.7	134.3	127.2	134.8	129.5	126.4	132.9	122.2	137.6	128.9
1999	133.0	135.1	125.5	135.9	132.3	130.5	133.0	127.9	137.6	132.0
2000 2001	138.0 140.7	137.2 141.3	123.5 127.7	138.3 142.4	138.1 140.4	138.4 141.4	133.9 134.0	138.7 142.8	138.8 139.7	138.2 141.5
2002	138.9	140.1	128.5	141.0	138.3	138.8	133.0	139.8	139.1	139.4
2003	143.3 148.5	145.9 152.7	130.0 138.2	147.2 153.9	142.4 147.2	144.7 150.9	133.1 135.0	148.4 156.6	139.5 141.4	145.3 151.7
2005	155.7	155.7	140.2	156.9	155.5	161.9	136.6	172.0	144.6	160.4
2006 2007	160.4 166.6	156.7 167.0	151.3 170.2	157.1 166.7	161.0 166.2	169.2 175.6	136.9 138.3	182.6 191.7	146.9 149.5	166.0 173.5
2008	177.1	178.3	175.5	178.6	176.6	189.1	141.2	210.5	153.8	186.3 179.2
2009 P 2008: Jan	172.6 172.0	175.5 174.5	157.8 199.3	177.3 172.1	171.2 171.0	179.6 181.9	144.3 140.1	194.3 200.3	156.8 151.4	179.2
Feb	172.3	174.5	180.6	173.0	171.7	182.7	140.2	201.4	151.8	180.4
Mar Apr	175.1 176.5	176.0   175.5	194.3 177.6	174.2 175.3	174.6 176.4	187.1 189.6	139.9 140.5	208.2 211.7	151.8 152.4	184.2 185.8
May	179.8	177.6	172.1	178.2	180.1	195.0	140.3	220.0	152.7	190.3
June July	182.4 185.1	180.0 181.0	183.0 164.1	179.7 182.7	182.8 185.9	199.0 203.4	139.7 139.6	226.4 233.1	152.7 153.3	193.8 197.2
Aug	182.2	181.3	159.8	183.5	182.2	197.5	140.2	223.9	153.9	193.2
Sept Oct	182.2 177.4	181.5 180.7	168.9 170.0	182.8 181.8	182.1 176.3	197.2 187.0	140.3 144.8	223.4 205.4	154.3 157.0	193.0 185.5
Nov	172.0	179.8	175.2	180.3	169.6	177.0	144.2	190.6	156.9	178.2
Dec	168.8	177.7	161.7	179.4	166.1	171.5	144.4	182.1	157.2	173.7
2009: Jan Feb	170.4 169.9	177.7 175.0	169.7 155.6	178.4 177.0	168.0 168.0	174.4 174.5	144.3 144.3	186.5 186.6	157.4 157.2	175.8 175.2
iviar	169.1 170.3	173.8 175.9	155.0 165.4	175.8 176.9	167.2 168.3	173.5 175.2	144.1 144.4	185.2 187.7	156.9	174.2 176.0
Apr May	171.1	174.0	134.6	178.3	169.7	177.5	144.2	191.2	156.8 156.3	177.3
June	174.3 172.4	176.1	156.2 141.8	178.2	173.1	182.7 180.2	144.7 143.3	198.7 195.7	156.6 155.9	181.7 179.2
July Aug	174.2	173.5 173.9	145.5	177.0 177.0	171.3 173.4	183.3	143.8	200.1	156.4	181.6
Aug Sept <sup>1</sup> Oct <sup>1</sup>	173.4 174.1	173.9 175.9	145.0 165.4	177.0 176.9	172.5 172.9	181.9 182.0	143.1 145.0	198.4 197.6	156.1 157.2	180.6 181.2
Nov 1	176.2	176.8	173.4	177.0	175.2	185.3	145.6	202.2	157.6	183.9
Dec 1	176.2	179.7	186.6	178.7	174.6	184.6	144.9	201.4	157.2	184.1

<sup>&</sup>lt;sup>1</sup> Data have been revised through August 2009; data are subject to revision four months after date of original publication. See next page for continuation of table.

Table B–65. Producer price indexes by stage of processing, 1965–2009—Continued [1982=100]

		Inte	ermediate r	naterials, s	upplies, an	d compone	ents		Cr	ude materia	als for furth	ner process	ing
V				Materia		Proc- essed				Food-		Other	
Year or month	Total	Foods and feeds <sup>2</sup>	Other	For manu- factur- ing	For con- struc- tion	fuels and lubri- cants	Con- tainers	Supplies	Total	stuffs and feed- stuffs	Total	Fuel	Other
1965 1966 1967 1968	31.2 32.0 32.2 33.0 34.1	41.8 41.5 42.9	30.7 31.3 31.7 32.5 33.6	33.6 34.3 34.5 35.3 36.5	32.8 33.6 34.0 35.7 37.7	16.5 16.8 16.9 16.5 16.6	33.5 34.5 35.0 35.9 37.2	35.0 36.5 36.8 37.1 37.8	31.1 33.1 31.3 31.8 33.9	39.2 42.7 40.3 40.9 44.1	21.1 21.6 22.5	10.6 10.9 11.3 11.5 12.0	27.7 28.3 26.5 27.1 28.4
1969 1970 1971 1972 1973 1974 1975 1976 1977 1978	35.4 36.8 38.2 42.4 52.5 58.0 60.9 64.9 69.5 78.4	45.6 46.7 49.5 70.3 83.6 81.6 77.4 79.6 84.8 94.5	34.8 36.2 37.7 40.6 50.5 56.6 60.0 64.1 68.6 77.4	38.0 38.9 40.4 44.1 56.0 61.7 64.0 67.4 72.0 80.9	38.3 40.8 43.0 46.5 55.0 60.1 64.1 69.3 76.5 84.2	17.7 19.5 20.1 22.2 33.6 39.4 42.3 47.7 49.9 61.6	39.0 40.8 42.7 45.2 53.3 60.0 63.1 65.9 71.0 79.4	39.7 40.8 42.5 51.7 56.8 61.8 65.8 69.3 72.9 80.2	35.2 36.0 39.9 54.5 61.4 61.6 63.4 65.5 73.4 85.9	45.2 46.1 51.5 72.6 76.4 77.4 76.8 77.5 87.3	23.8 24.7 27.0 34.3 44.1 43.7 48.2 51.7 57.5 69.6	13.8 15.7 16.8 18.6 24.8 30.6 34.5 42.0 48.2 57.3	29.1 29.4 32.3 42.9 54.5 50.0 54.9 56.3 61.9 75.5
1980 1981 1982 1983 1984 1985 1986 1987 1987	90.3 98.6 100.0 100.6 103.1 102.7 99.1 101.5 107.1 112.0	105.5 104.6 100.0 103.6 105.7 97.3 96.2 99.2 109.5 113.8	89.4 98.2 100.0 100.5 103.0 103.0 99.3 101.7 106.9 111.9	91.7 98.7 100.0 101.2 104.1 103.3 102.2 105.3 113.2 118.1	91.3 97.9 100.0 102.8 105.6 107.3 108.1 109.8 116.1 121.3	85.0 100.6 100.0 95.4 95.7 92.8 72.7 73.3 71.2 76.4	89.1 96.7 100.0 100.4 105.9 109.0 110.3 114.5 120.1	89.9 96.9 100.0 101.8 104.1 104.4 105.6 107.7 113.7 118.1	95.3 103.0 100.0 101.3 103.5 95.8 87.7 93.7 96.0 103.1	104.6 103.9 100.0 101.8 104.7 94.8 93.2 96.2 106.1 111.2	84.6 101.8 100.0 100.7 102.2 96.9 81.6 87.9 85.5 93.4	69.4 84.8 100.0 105.1 105.1 102.7 92.2 84.1 82.1 85.3	91.8 109.8 100.0 98.8 101.0 94.3 76.0 88.5 85.9 95.8
1990 1991 1992 1993 1994 1995 1996 1997 1998	114.5 114.4 114.7 116.2 118.5 124.9 125.7 125.6 123.0 123.2	113.3 111.1 110.7 112.7 114.8 114.8 128.1 125.4 116.2	114.5 114.6 114.9 116.4 118.7 125.5 125.6 125.7 123.4 123.9	118.7 118.1 117.9 118.9 122.1 130.4 128.6 128.3 126.1	122.9 124.5 126.5 132.0 136.6 142.1 143.6 146.5 146.8	85.9 85.3 84.5 84.7 83.1 84.2 90.0 89.3 81.1	127.7 128.1 127.7 126.4 129.7 148.8 141.1 136.0 140.8 142.5	119.4 121.4 122.7 125.0 127.0 132.1 135.9 135.9 134.8 134.2	108.9 101.2 100.4 102.4 101.8 102.7 113.8 111.1 96.8 98.2	113.1 105.5 105.1 108.4 106.5 105.8 121.5 112.2 103.9 98.7	101.5 94.6 93.5 94.7 94.8 96.8 104.5 106.4 88.4 94.3	84.8 82.9 84.0 87.1 82.4 72.1 92.6 101.3 86.7 91.2	107.3 97.5 94.2 94.1 97.0 105.8 105.7 103.5 84.5 91.1
2000	129.2 129.7 127.8 133.7 142.6 154.0 164.0 170.7 188.3 172.6	111.7 115.9 115.5 125.9 137.1 133.8 135.2 154.4 181.6 165.9	130.1 130.5 128.5 134.2 143.0 155.1 165.4 171.5 188.7 173.1	128.1 127.4 126.1 129.7 137.9 146.0 155.9 162.4 177.2 162.8	150.7 150.6 151.3 153.6 166.4 176.6 188.4 192.5 205.4 202.9	102.0 104.5 96.3 112.6 124.3 150.0 162.8 173.9 206.2 162.3	151.6 153.1 152.1 153.7 159.3 167.1 175.0 180.3 191.8 195.8	136.9 138.7 138.9 141.5 146.7 151.9 157.0 161.7 173.8 172.2	120.6 121.0 108.1 135.3 159.0 182.2 184.8 207.1 251.8 175.0	100.2 106.1 99.5 113.5 127.0 122.7 119.3 146.7 163.4 134.4	130.4 126.8 111.4 148.2 179.2 223.4 230.6 246.3 313.9 197.1	136.9 151.4 117.3 185.7 211.4 279.7 241.5 236.8 298.3 165.6	118.0 101.5 101.0 116.9 149.2 176.7 210.0 238.7 308.5 211.0
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	177.8 179.1 184.5 187.3 192.8 197.2 203.1 199.4 198.6 189.0 179.2	170.6 175.0 180.3 180.5 184.5 186.6 195.5 194.3 190.0 179.9 174.7	178.2 179.4 184.7 187.7 193.3 197.8 203.6 199.7 199.1 189.5 179.4	168.4 170.1 173.1 175.5 179.1 182.4 187.4 188.7 186.7 180.3 171.1 163.7	194.4 195.7 197.3 200.2 203.3 206.5 209.8 212.9 214.0 212.2 210.2	188.6 189.0 206.1 211.8 227.3 238.4 250.1 225.2 224.5 193.9 168.7	185.1 185.7 185.9 187.0 187.6 189.2 191.9 195.0 198.4 199.1	166.8 168.1 170.0 171.3 173.1 174.6 178.3 178.9 179.0 177.0 175.3	235.5 245.5 262.1 274.6 293.1 301.2 313.3 274.6 254.2 212.0 183.3 172.6	162.6 165.4 169.2 168.1 173.2 178.1 178.9 170.6 167.6 147.9 144.2	283.8 299.9 327.7 352.4 382.4 393.0 414.9 350.0 314.2 253.9 203.2	253.9 283.5 306.9 329.1 369.2 378.5 410.3 309.5 273.1 235.7 205.7	288.0 295.6 324.6 349.6 372.4 383.3 398.5 357.2 323.5 252.8 192.4
2009: Jan Feb Mar Apr Apr June July Aug Sept 1 Oct 1 Nov 1 Dec 1	171.4 169.7 168.0 168.6 170.2 172.7 172.3 174.8 175.3 174.8 176.3	165.8 164.6 163.5 164.5 167.3 169.3 166.5 166.1 165.7 164.8 165.5 167.8	171.8 170.1 168.4 168.9 170.4 172.9 172.7 175.5 176.1 175.6 177.2	162.7 161.0 159.5 158.9 160.1 160.9 161.6 163.8 165.6 165.1 166.4	207.0 204.8 204.2 203.2 202.8 202.0 201.9 201.5 201.8 201.9 201.4 202.2	153.4 150.7 146.5 151.4 156.5 167.0 164.1 172.2 170.0 169.3 173.8 172.1	200.8 199.5 198.4 197.6 196.1 195.4 194.3 193.5 193.5 193.8 193.1	172.9 172.3 171.9 172.0 172.3 172.8 172.2 171.9 172.1 171.7 171.8 172.5	170.2 160.7 160.1 163.9 171.5 179.8 172.9 178.4 174.1 182.2 192.0 193.8	136.1 133.3 131.0 136.5 140.5 141.0 133.2 130.2 127.3 131.6 133.7 138.6	186.5 171.5 172.6 174.6 184.7 199.8 194.5 207.5 202.3 213.2 229.6 228.3	217.1 178.9 158.3 152.8 147.7 150.6 159.8 156.0 138.7 154.6 182.8 190.5	160.3 160.9 176.2 182.9 202.6 225.1 210.2 234.1 237.6 244.6 252.2 244.7

 $<sup>^2</sup>$  Intermediate materials for food manufacturing and feeds. Source: Department of Labor (Bureau of Labor Statistics).

TABLE B-66. Producer price indexes by stage of processing, special groups, 1974-2009 [1982=100]

			Finis	shed ods			Interm		iterials, su iponents	pplies,	Cru	ıde materi proce	als for fur essing	ther
Year or month	Total	Foods	Energy	Excludin	Capital equip- ment	Con- sumer goods exclud- ing foods and energy	Total	Foods and feeds <sup>1</sup>	Energy	Other	Total	Food- stuffs and feed- stuffs	Energy	Other
1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1988 1989 1992 1991 1992 1993 1991 1992 1993 1994 1995 1996 1997 2000 2001 2001 2002 2004 2005 2008 2009 P 2008 2009 P 2008 2009 2009	52.6 58.2 60.8 64.7 69.8 77.6 88.0 96.1 100.0 101.6 103.2 105.4 108.0 113.6 119.2 121.7 123.7 127.9 131.3 131.3 131.3 131.3 131.3 131.7 133.0 140.7 133.0 140.7 140.7 150.4 160.6 177.1 177.0 17	644 698 686 733 799 97.8 97.8 97.8 101.0 105.4 107.3 101.0 105.4 112.6 1118.7 124.1 123.3 135.1 137.2 126.7 155.7 167.0 175.5 175.5 175.5 175.5 175.5 175.5 175.5 175.5 175.7	26.2 30.7 34.3 39.7 42.3 57.1 100.0 95.2 91.2 91.2 95.2 91.2 91.2 91.2 91.2 91.2 91.2 91.2 91	53.6 6.9.7	50.5 58.2 62.1 71.3 77.5 85.8 94.6 100.0 102.8 105.2 107.5 111.7 114.3 118.8 122.9 126.7 133.1 133.7 138.2 137.6 138.8 139.7 139.5 151.8 1		52.5 58.0 60.9 69.5 75.0 60.9 69.5 75.0 60.9 69.5 75.0 60.9 69.5 75.0 60.9 69.5 75.0 60.9 69.5 75.0 60.9 69.5 75.0 60.0 60.0 60.0 60.0 60.0 60.0 60.0 6	83.6 81.6 81.6 81.6 81.6 81.6 81.6 81.6 81	33.1 38.7 41.5 46.8 49.1 61.1 84.9 100.5 100.0 95.3 95.5 92.6 72.6 73.0 76.1 85.5 85.1 84.3 84.3 84.3 84.3 84.3 101.7 111.9 123.2 149.2 149.2 149.2 149.2 149.2 149.2 149.2 149.2 149.2 149.2 149.2 149.2 149.2 162.8 191.5 1	54.0 60.2 63.8 67.6 72.5 80.7 90.3 97.7 100.0 101.6 104.9 107.2 120.2 120.2 120.2 121.4 122.0 123.8 127.1 135.2 133.5 133.5 135.8 135.8 135.8 136.4 135.8 136.4 136.4 136.8 136.4 136.8 136.8 137.1 136.8 13	61.4 61.6 63.4 61.6 63.4 65.5 73.4 95.3 103.0 101.1 103.1 103.1 103.5 103.1 101.2 100.4 101.8 111.1 125.1 120.6 102.7 113.8 111.1 125.1 125.1 125.1 125.1 126.1 127.1 12	76.4 77.4 76.8 77.5 87.3 100.0 104.6 103.9 101.8 104.7 94.8 93.2 96.2 106.1 111.2 113.1 105.5 105.8 121.5 112.9 98.7 100.2 113.1 113.4 166.6 165.4 168.4 168.2 173.2 178.1 178.9 170.6 167.6 144.2 135.5	27.8 83.3 3.3 3.3 3.3 3.3 3.5 3.3 3.5 3.3 3.5 3.3 3.5 3.3 3.5 3.5	83.3 69.3 80.2 79.8 87.8 106.2 113.1 111.7 100.0 105.3 111.7 104.9 103.1 115.7 133.0 136.3 128.2 173.6 155.8 156.5 142.1 135.2 140.2 156.5 142.1 135.7
Feb	170.4 169.9 169.1 170.3 171.1 174.3 172.4 174.2 173.4 174.1 176.2 176.2	177.7 175.0 173.8 175.9 174.0 176.1 173.5 173.9 175.9 176.8 179.7	136.3 133.2 137.2 142.9 154.4 149.6 156.1 153.5 152.0 158.4 156.8	171.3 171.4 171.4 171.1 171.4 170.8 171.2 170.9 172.0 172.6 172.4	157.4 157.2 156.9 156.8 156.3 156.6 155.9 156.4 156.1 157.2 157.6 157.2	181.0 181.4 181.5 181.3 181.7 181.1 181.5 181.1 182.3 183.1 183.0	169.7 168.0 168.6 170.2 172.7 172.3 174.8 175.3 174.8 176.3 176.7	164.6 163.5 164.5 167.3 169.3 166.5 166.1 165.7 164.8 165.5 167.8	149.3 144.1 149.5 157.2 167.8 165.3 174.5 172.0 171.1 176.4 174.5	174.6 173.4 172.6 171.8 171.6 171.9 172.3 173.3 174.7 174.5 174.9 175.7	170.2 160.7 160.1 163.9 171.5 179.8 172.9 178.4 174.1 182.2 192.0 193.8	133.3 131.0 136.5 140.5 141.0 133.2 130.2 127.3 131.6 133.7 138.6	173.0 152.1 153.3 155.0 164.2 181.2 173.0 184.1 174.3 188.5 211.4 205.2	224.9 222.9 224.4 234.9 242.6 247.1 263.6 271.1 272.3 270.4 284.2

Source: Department of Labor (Bureau of Labor Statistics).

Intermediate materials for food manufacturing and feeds.
 Data have been revised through August 2009; data are subject to revision four months after date of original publication.

TABLE B-67. Producer price indexes for major commodity groups, 1965-2009 [1982=100]

	Farm p	products and proc foods and feeds	essed			Industrial commodities		
Year or month	Total	Farm products	Processed foods and feeds	Total	Textile products and apparel	Hides, skins, leather, and related products	Fuels and related products and power	Chemicals and allied products <sup>1</sup>
1965 1966 1967 1968 1969	39.0 41.6 40.2 41.1 43.4	40.7 43.7 41.3 42.3 45.0	38.0 40.2 39.8 40.6 42.7	30.9 31.5 32.0 32.8 33.9	48.8 48.9 48.9 50.7 51.8	35.9 39.4 38.1 39.3 41.5	13.8 14.1 14.4 14.3 14.6	33.9 34.0 34.2 34.1 34.2
1970 1971 1972 1973 1974 1975 1976 1977 1978	44.9 45.8 49.2 63.9 71.3 74.0 73.6 75.9 83.0 92.3	45.8 46.6 51.6 72.7 77.4 77.0 78.8 79.4 87.7 99.6	44.6 45.5 48.0 58.9 68.0 72.6 70.8 74.0 80.6 88.5	35.2 36.5 37.8 40.3 49.2 54.9 58.4 62.5 67.0 75.7	52.4 53.3 55.5 60.5 68.0 67.4 72.4 75.3 78.1 82.5	42.0 43.4 50.0 54.5 55.2 56.5 63.9 68.3 76.1	15.3 16.6 17.1 19.4 30.4 35.4 38.3 43.6 46.5 58.9	35.0 35.6 35.6 37.6 50.2 62.0 64.0 65.9 68.0 76.0
1980	98.3 101.1 100.0 102.0 105.5 100.7 101.2 103.7 110.0 115.4	102.9 105.2 100.0 102.4 105.5 95.1 92.9 95.5 104.9 110.9	95.9 98.9 100.0 101.8 105.4 105.4 107.9 112.7 117.8	88.0 97.4 100.0 101.1 103.3 103.7 100.0 102.6 106.3 111.6	89.7 97.6 100.0 100.3 102.7 102.9 103.2 105.1 109.2 112.3	94.7 99.3 100.0 103.2 109.0 108.9 113.0 120.4 131.4 136.3	82.8 100.2 100.0 95.9 94.8 91.4 69.8 70.2 66.7 72.9	89.0 98.4 100.0 100.3 102.9 103.7 102.6 106.4 116.3 123.0
1990 1991 1992 1993 1994 1995 1996 1997 1998	118.6 116.4 115.9 118.4 119.1 120.5 129.7 127.0 122.7 120.3	112.2 105.7 103.6 107.1 106.3 107.4 122.4 112.9 104.6 98.4	121.9 121.9 122.1 124.0 125.5 127.0 133.3 134.0 131.6	115.8 116.5 117.4 119.0 120.7 125.5 127.3 127.7 124.8 126.5	115.0 116.3 117.8 118.0 118.3 120.8 122.4 122.9 121.1	141.7 138.9 140.4 143.7 148.5 153.7 150.5 154.2 148.0 146.0	82.3 81.2 80.4 80.0 77.8 78.0 85.8 86.1 75.3 80.5	123.6 125.6 125.9 128.2 132.1 142.5 142.1 143.9 144.2
2000	122.0 126.2 123.9 132.8 142.0 141.3 141.2 157.8 173.8 161.4	99.5 103.8 99.0 111.5 123.3 118.5 117.0 143.4 161.3 134.5	133.1 137.3 136.2 143.4 151.2 153.1 153.8 165.1 180.5 176.2	134.8 135.7 132.4 139.1 147.6 160.2 168.8 175.1 192.3 174.9	121.4 121.3 119.9 119.8 121.0 122.8 124.5 128.9 128.9	151.5 158.4 157.6 162.3 164.5 165.4 168.4 173.1 156.7	103.5 105.3 93.2 112.9 126.9 156.4 166.7 177.6 214.6 158.9	151.0 151.8 151.9 161.8 174.4 192.0 205.8 214.8 245.5 229.7
2008: Jan	169.8 171.1 174.5 174.0 177.1 180.4 182.6 179.4 178.0 169.3 166.9	164.2 164.4 169.6 166.7 169.7 176.2 174.3 164.7 163.5 145.3 143.1	172.7 174.6 176.9 177.8 180.8 182.4 187.0 187.3 185.9 182.5 180.0	182.8 184.6 190.2 133.8 200.0 204.0 209.5 202.4 200.1 189.3 178.4 172.3	126.9 127.1 127.2 127.6 128.2 129.1 130.1 131.0 130.7 130.7	172.2 172.5 172.5 172.9 172.9 174.8 175.0 174.9 175.2 175.1 169.6	195.9 199.5 217.1 224.7 243.2 254.8 268.7 237.9 230.2 194.5 162.6 145.7	229.2 231.3 235.6 240.4 246.5 252.7 262.8 263.3 264.2 252.5 239.3 227.6
2009: Jan	162.4 160.4 158.9 161.8 163.4 165.2 160.3 159.6 158.1 160.5 161.6	136.4 132.8 130.6 136.8 137.8 142.1 131.6 130.1 126.3 133.0 135.6	176.8 175.5 174.4 175.5 177.4 177.9 176.2 175.9 175.7 175.6 175.9	172.6 170.8 169.5 170.3 172.0 175.5 174.6 177.7 177.5 177.9 180.5 180.4	130.2 129.9 129.4 129.7 129.1 129.6 129.1 129.4 129.5 129.4	157.0 157.0 157.0 153.6 153.8 151.9 153.1 155.2 159.0 160.1 159.2	148.5 143.6 140.2 144.8 152.2 165.0 160.7 169.6 165.8 166.9 175.8	226.8 226.5 225.8 225.2 225.8 230.0 231.1 234.1 234.1 234.5 237.1

See next page for continuation of table.

Prices for some items in this grouping are lagged and refer to one month earlier than the index month.
 Data have been revised through August 2009; data are subject to revision four months after date of original publication.

Table B-67. Producer price indexes for major commodity groups, 1965-2009—Continued [1982=100]

				Ind	ustrial commo	dities—Contir	nued			
V	Rubber	Lumber	Pulp,	Metals		Furniture	Non-	Transpo equip	ortation oment	
Year or month	and plastic products	and wood products	paper, and allied products	and metal products	Machinery and equipment	and household durables	metallic mineral products	Total	Motor vehicles and equip- ment	Miscel- laneous products
1965 1966 1967 1968	39.7 40.5 41.4 42.8 43.6	33.7 35.2 35.1 39.8 44.0	33.3 34.2 34.6 35.0 36.0	32.0 32.8 33.2 34.0 36.0	33.7 34.7 35.9 37.0 38.2	46.8 47.4 48.3 49.7 50.7	30.4 30.7 31.2 32.4 33.6	40.4	39.2 39.2 39.8 40.9 41.7	34.7 35.3 36.2 37.0 38.1
1970	44.9 45.2 45.3 46.6 56.4 62.2 66.0 69.4 72.4	39.9 44.7 50.7 62.2 64.5 62.1 72.2 83.0 96.9	37.5 38.1 39.3 42.3 52.5 59.0 62.1 64.6 67.7	38.7 39.4 40.9 44.0 57.0 61.5 65.0 69.3 75.3	40.0 41.4 42.3 43.7 50.0 57.9 61.3 65.2 70.3	51.9 53.1 53.8 55.7 61.8 67.5 70.3 73.2 77.5	35.3 38.2 39.4 40.7 47.8 54.4 58.2 62.6 69.6	41.9 44.2 45.5 46.1 50.3 56.7 60.5 64.6	43.3 45.7 47.0 47.4 51.4 57.6 61.2 65.2 70.0	39.8 40.8 41.5 43.3 48.1 53.4 55.6 59.4 66.7
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	80.5 90.1 96.4 100.0 100.8 102.3 101.9 103.0 103.0 109.3	105.5 101.5 102.8 100.0 107.9 108.0 106.6 107.2 112.8 118.9	75.9 86.3 94.8 100.0 103.3 110.3 116.1 121.8 130.4 137.8	86.0 95.0 99.6 100.0 101.8 104.8 104.4 103.2 107.1 118.7 124.1	76.7 86.0 94.4 100.0 102.7 105.1 107.2 108.8 110.4 113.2	82.8 90.7 95.9 100.0 103.4 105.7 107.1 108.2 109.9 113.1 116.9	77.6 88.4 96.7 100.0 101.6 105.4 108.6 110.0 111.2 112.6	75.3 82.9 94.3 100.0 102.8 105.2 107.9 110.5 112.5 114.3	75.8 83.1 94.6 100.0 102.2 104.1 106.4 109.1 111.7 113.1	75.5 93.6 96.1 100.0 104.8 107.0 109.4 111.6 114.9 120.2
1990 1991 1992 1993 1993 1995 1996 1997 1998	113.6 115.1 115.1 116.0 117.6 124.3 123.8 123.2 122.6	120.7 129.7 132.1 146.6 174.0 180.0 178.1 176.1 183.8 179.1	141.2 142.9 145.2 147.3 152.5 172.2 168.7 167.9 171.7	122.9 120.2 119.2 119.2 124.8 134.5 131.0 131.8 127.8	120.7 123.0 123.4 124.0 125.1 126.6 126.5 125.9 124.9	119.3 119.2 121.2 122.2 123.7 126.1 128.2 130.4 130.8 131.3	114.7 117.2 117.3 120.0 124.2 129.0 131.0 133.2 135.4	121.5 126.4 130.4 133.7 137.2 139.7 141.7 141.6 141.2	118.2 122.1 124.9 128.0 131.4 133.0 134.1 132.7 131.4 131.7	134.2 140.8 145.3 145.4 141.9 145.4 147.7 150.9 156.0 166.6
2000 2001 2002 2003 2004 2005 2006 2007 2008 2007 2008	125.5 127.2 126.8 130.1 133.8 143.8 153.8 155.0 165.9	178.2 174.4 173.3 177.4 195.6 196.5 194.4 192.4 191.3 183.0	183.7 184.8 185.9 190.0 195.7 202.6 209.8 216.9 226.8 225.5	128.1 125.4 125.9 129.2 149.6 160.8 181.6 193.5 213.0	124.0 123.7 122.9 121.9 122.1 123.7 126.2 127.3 129.7 131.3	132.6 133.2 133.5 133.9 135.1 139.4 142.6 144.7 148.9	142.5 144.3 146.2 148.2 153.2 164.2 179.9 186.2 197.1	143.8 145.2 144.6 145.7 148.6 151.0 152.6 155.0 158.6	132.3 131.5 129.9 129.6 131.0 131.5 131.0 132.2 134.1	170.8 181.3 182.4 179.6 183.2 195.1 205.6 210.3 216.6 217.4
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec Mar Apr Move Dec Mar Apr May Aug	159.2 159.9 160.6 161.3 162.8 164.0 167.4 169.7 171.6 172.5 172.1	189.3 189.1 189.9 190.5 193.8 194.6 193.5 193.5 193.7 191.1 188.9	222.3 223.4 224.0 224.9 225.2 225.7 227.0 229.6 231.1 230.9 228.8 228.0	197.5 201.8 208.0 217.6 223.4 226.9 231.8 230.9 223.7 209.1 195.9 189.7	127.8 128.3 128.5 128.7 129.2 129.6 130.4 130.5 130.7 130.9 131.1	145.7 146.1 146.4 147.2 147.3 148.0 149.3 150.3 151.0 151.8 152.1	188.5 188.8 189.5 191.0 192.1 194.4 198.8 202.7 204.4 205.0 205.3 204.6	157.5 157.5 156.8 157.6 157.5 156.7 157.6 157.6 162.8 162.4 162.8	133.7 132.9 133.6 133.3 132.1 131.8 132.4 132.4 133.4 137.5	212.7 213.3 214.8 214.9 216.4 217.1 218.3 218.4 218.3 218.8 218.1
2009: Jan	167.5 165.3 164.9 164.5 163.9 163.7 163.9 164.5 165.7 165.6	185.3 183.5 181.7 181.2 180.9 180.8 182.8 183.0 184.1 183.6 184.4	228.0 227.0 226.7 225.8 224.8 224.5 224.0 224.4 225.5 224.7 225.0 225.1	187.0 183.9 181.7 179.9 180.5 181.7 183.5 189.1 192.8 193.6 193.3	131.4 131.3 131.5 131.3 131.1 131.2 131.2 131.2 131.4 131.3 131.4	152.9 153.3 153.3 153.4 153.3 153.1 153.1 152.9 153.3 153.2	205.8 203.8 203.9 203.7 203.4 202.5 202.1 201.2 200.8 200.6 200.0	162.8 162.7 162.2 162.3 161.8 162.3 160.9 161.6 163.0 163.4	137.2 137.0 136.6 136.9 136.8 137.5 135.7 136.4 135.7 138.1 138.5	218.0 219.0 220.0 217.9 216.6 216.4 216.2 215.9 216.7 216.9 217.5

Source: Department of Labor (Bureau of Labor Statistics).

Table B-68. Changes in producer price indexes for finished goods, 1969-2009 [Percent change]

	finis	tal shed ods	cons	shed umer ods		Finished g	oods exclu	ding consi	umer foods	3	Finis ene go		Finishe exclu foods an	ıdıng
Year or month	Dec.	Year	Dec.	Year	To	tal	Cons		Cap equip	oital oment	Dec.	Year	Dec.	Year
	to Dec. <sup>1</sup>	to year	to Dec. <sup>1</sup>	to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	Dec. to Dec. <sup>1</sup>	Year to year	to Dec. <sup>1</sup>	to year	to Dec. <sup>1</sup>	to year
1969	4.9 2.1 3.3 3.9 11.7 18.3 6.6 3.8 6.7 7 1.8 7.1 3.6 1.7 1.8 7.1 2.2 4.0 4.9 5.7 -1.1 6.6 -1.2 2.9 3.6 -1.2 4.0 4.9 4.4 1.1 6.2 -9 4.4	3.8 3.4 3.1 3.2 3.1 15.4 10.6 4.5 6.4 7.9 11.2 13.4 1.6 2.1 1.0 2.1 2.5 5.2 4.9 2.1 1.2 6.1 1.9 2.7 4.8 3.8 2.0 3.8 3.0 3.9 6.3 -2.5	8.1 -2.3 5.8 7.9 22.7 12.8 5.6 -2.5 6.9 11.7 7.4 7.5 1.5 2.0 2.3 3.5 1.5 2.0 2.8 -1.5 5.2 2.6 -1.5 5.2 2.6 -1.5 1.6 2.4 1.9 3.4 1.8 1.7 1.9 3.1 1.9 3.1 1.7 1.9 1.9 1.7 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	6.0 3.3 1.6 5.4 20.5 14.0 9.3 5.8 2.9 2.1 2.8 2.1 2.6 2.1 2.1 2.6 4.4 4.2 6 1.7 3.6 3.0 9.3 5.8 4.4 4.7 4.8 4.7 4.8 4.9 4.1 4.0 6.6 6.6 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8	3.3 4.3 2.0 2.3 6.6 6.6 21.1 7.2 6.2 6.8 8.3 14.8 13.4 7.2 4.2 4.2 4.2 4.3 3.2 4.8 6.9 3.1 1.6 4.1 2.2 2.3 2.6 6.4 4.9 2.3 3.6 6.4 1.9 2.3 3.6 6.4 1.9 2.3 3.6 6.4 1.9 2.3 3.6 6.4 1.9 2.3 3.6 6.5 6.4 1.0 5.8 6.4 1.0 5.8	2.8 3.5 3.7 2.00 4.00 16.2 12.1 16.2 11.8 16.2 10.3 4.6 1.8 1.4 1.4 1.4 2.6 5.0 5.0 3.0 3.0 3.0 1.8 1.1 1.6 1.9 2.4 1.7 1.5 3.0 3.5 3.5 3.5 3.5 3.5 3.5 3.7  Percent of	2.8 3.8 2.1 2.1 7.5 20.3 6.8 6.0 6.7 8.5 17.6 4.29 8 2.16.6 4.1 5.3 8.71.6 -1.4 2.0 2.3 3.7 -1.51.53 8.8 7.7 -1.54 8.8 4.74 8.6 6.6 6.6 6.6 6.7 6.7 6.7 6.7 6.6 6.6 6	2.3 3.0 3.5 1.8 4.6 17.0 10.4 6.2 7.3 7.1 13.3 18.5 10.3 4.1 1.4 6.2 2.2 2.5 6.6 5.9 2.9 2.9 2.9 1.8 7.7 2.0 2.9 2.9 3.8 7.7 2.0 2.9 3.8 4.3 4.3 4.3 4.3 4.3 4.3 4.3 5.6 6.1 2.2 2.1 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 6.1 2.2 2.2 2.2 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 2.3 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2	4.8 4.8 2.4 2.1 5.1 5.1 6.5 7.2 7.2 8.0 8.8 11.4 9.2 3.9 2.1 1.3 3.6 3.8 3.4 2.5 1.7 1.8 2.2 4.6 0.0 0.0 1.8 2.4 1.2 2.1 2.1 2.2 2.4 2.5 2.2 2.3 3.4 2.5 2.5 2.2 2.3 3.4 2.5 3.8 3.4 3.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	3.5 4.7 4.0 2.6 3.3 14.3 15.2 6.7 6.7 9.8 7.9 8.7 10.3 2.2 2.0 1.8 2.3 3.9 3.5 1.9 1.2 1.9 1.2 1.9 1.4 2.3 1.4 2.3 1.4 2.3 1.4 2.3 1.4 2.3 1.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2	16.3 11.6 12.0 8.5 58.1 27.9 14.1 -1 -9.2 -38.1 11.2 -3.6 9.5 30.7 -9.6 -3 -3 -4.1 11.7 -6.4 -11.7 11.7 11.7 11.7 11.7 11.1 11.7 11.7	17.2 11.7 15.7 6.5 35.0 49.2 19.1 -1.5 -4.8 -4.2 -3.9 9.9 14.2 4.1 -1.4 6.5 2 -10.0 19.4 2.8 19.4 2.8 11.4 1.4 1.4 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	17.7 6.00 5.7 6.2 8.4 9.4 10.8 7.7 2.7 2.7 2.1 4.3 4.2 3.5 3.1 2.0 2.6 6.6 6.0 2.55 1.3 9.9 1.3 9.9 1.0 2.0 2.1 4.9 1.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	11.4 11.4 5.7 6.0 7.5 8.6 5.7 3.0 2.4 2.5 2.3 2.4 3.7 3.6 6.2 4.4 1.0 2.1 1.4 2.5 1.0 2.1 1.4 2.5 2.1 1.4 2.5 2.5 1.0 2.4 3.9 3.9 1.7 1.3 1.4 1.4 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6
		Season-		Season-		Season-	_	Season-		Season-	Ī	Season-	l	Season-
	Unad- justed	ally ad- justed	Unad- justed	ally ad- justed	Unad- justed	ally ad- justed	Unad- justed	ally ad- justed	Unad- justed	ally ad- justed	Unad- justed	ally ad- justed	Unad- justed	ally ad- justed
2008: Jan Feb Mar Apr June July Sept Oct Nov Dec 2009: Jan Feb Mar Apr May July July Aug Ct 2 Va	0.9 22 1.6 8 8 1.9 1.4 1.5 -1.6 -2.6 -3.0 -1.95 7.7 5 1.9 -1.15 4.4 1.2	0.9 .4 .9 .2 .1.5 .1.3 .1.3 .1.3 .1.3 .1.5 .1.1 .1.6 .1.7 .1.8 .1.9 .1.7 .1.9 .1.7 .1.9 .1.7 .1.9 .1.8 .1.9 .1.7 .1.9 .1.9 .1.1 .1.9 .1.9 .1.1 .1.9 .1.	1.3 5 1.4 3 1.2 1.4 6 1 5 1 7 1.2 1 1 2 1 5 7 1.2 1 2 1 2 1 2 1 2 1 1 2 1 2 1 2 1 2 1 2 1 2 2 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1	1.5 5 1.2 2.7 1.6 2.2 0.1 1.5 -1.6 1.8 1.55 -1.5 -1.5 -1.5 1.5 1.5 1.5 1.5 1.5 1.1	0.8 .4 1.7 1.0 2.1 1.5 1.7 -2.01 -3.2 -3.8 -2.1 1.1 057 7 8 2.0 -1.0 -1.0 -1.057 3 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1	0.7 8 7 1.7 1.3 1.5 7 1 -3.3 -1.9 1.1 3 -1.0 2.5 1.8 -1.0 2.2 2.6 6 0.0 2.1	1.0 .4 2.4 1.3 2.8 2.1 2.2 -2.9 -5.2 -5.3 -3.1 1.7 1.6 1.0 1.3 2.9 -1.47 -8 .11 1.8	0.8 9 1.0 1.1 2.3 1.8 1.9 -1.2 -3 -4.7 -3.0 1.6 4 -1.4 2.9 2.5 -1.4 3.0 -8 3.0 -2	0.5 3 .0 4.2 .0 4.4 4.3 7 -1 -2 -1 -1.3 -24 3 -24 3 -27 7 3 -3	0.5 .4 .1 .3 .3 .5 .4 .4 .6 .0 .4 .1 .1 .2 .4 .4 .7 .4 .7 .4 .7 .7 .4 .7 .7 .7 .4 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7	1.7 .4 6.2 2.8 8.6.8 5.0 4.6 -7.2 8 -14.1 -9.4 4.1 -2.3 3.0 -3.1 8.0 -3.1 4.2 4.2 4.4 -1.7 -1.0	1.3 1.4 2.4 4 5.2 4.3 3.8 -3.4 -1.3 -12.8 -12.4 -9.1 4.1 9 -4.7 6.6 -3.8 8.1 -2.0 1.6 6.9 4	0.6 .4 .1 .4 .2 .1 .4 .4 .4 .3 .3 .7 .1 .1 .1 .0 .1 .0 .2 .2 .2 .2 .2 .2 .6 .6 .3 .7 .1	0.5 .5.1 .5.3 .2.2 .6.5 .4.5 .3.3 .2.1 .1.1 .1.1 .4.4 .2.2 .3.3 .1.1 .1.5 .6.5 .0.0

Source: Department of Labor (Bureau of Labor Statistics).

Changes from December to December are based on unadjusted indexes.
 Data have been revised through August 2009; data are subject to revision four months after date of original publication.

# Money Stock, Credit, and Finance

#### TABLE B-69. Money stock and debt measures, 1970-2009

[Averages of daily figures, except debt end-of-period basis; billions of dollars, seasonally adjusted]

	M1	M2	Debt <sup>1</sup>		Percent chang	je
Year and month	Sum of currency, demand deposits, travelers checks, and other	M1 plus retail MMMF balances, savings deposits (including MMDAs),	Debt of domestic nonfinancial	From y 6 months	/ear or s earlier <sup>3</sup>	From previous period <sup>4</sup>
	checkable deposits (OCDs)	and small time deposits <sup>2</sup>	sectors	M1	M2	Debt
December:						
1970	214.4 228.3	626.5 710.3	1,420.2 1,555.2	6.5	13.4	9.5
1972	249.2	802.3	1,/11.2	9.2	13.0	10.0
1973 1974	262.9 274.2	855.5 902.1	1,895.5 2,069.9	5.5 4.3	6.6 5.4	10.7 9.2 9.3
1975 1976	287.1 306.2	1,016.2 1,152.0	2,261.8 2,505.3	4.7 6.7	12.6 13.4	9.3 10.8
1977	330.9	1,270.3 1,366.0	2,826.6	8.1 8.0	10.3	12.8 13.8
1978 1979	357.3 381.8	1,473.7	3,211.2 3,603.0	6.9	7.5 7.9	12.2
1980	408.5 436.7	1,599.8 1,755.5	3,953.5 4,361.7	7.0 6.9	8.6 9.7	9.5 10.4
1981 1982	474.8	1,909.3	4,783.4	8.7	8.8	10.4
1983 1984	521.4 551.6	2,125.7 2,308.8	5,359.2 6,146.2	9.8 5.8	11.3 8.6	12.0 14.8
1985 1986	619.8 724.7	2,494.6 2,731.4	7,123.1 7,966.3	12.4 16.9	8.0 9.5	15.6 11.9
1987	750.2 786.7	2,830.8 2,993.9	8,670.1	3.5 4.9	3.6	9.0 9.0
1988 1989	792.9	3,158.4	9,450.7 10,152.1	4.9	5.8 5.5	7.2
1990 1991	824.7 897.0	3,276.8 3,377.0	10,834.9 11,301.4	4.0 8.8	3.7 3.1	6.5 4.3
1992	1,024.9	3,430.2	11,816.5	14.3	1.6	4.5
1993 1994	1,129.6 1,150.6	3,480.7 3,496.5	12,391.4 12,973.6	10.2 1.9	1.5 .5	4.7 4.6
1995 1996	1,127.5 1,081.6	3,640.3 3,819.6	13,667.5 14,399.8	-2.0 -4.1	4.1 4.9	5.2 5.4
1997 1998	1,072.8 1,095.8	4,033.0 4,376.3	15,210.8 16,216.4	8 2.1	5.6 8.5	5.6 6.6
1999	1,122.7	4,634.6	17,291.6	2.5	5.9	6.4
2000 2001	1,087.7 1,182.2	4,917.9 5.434.1	18,167.3 19,302.3	-3.1 8.7	6.1 10.5	5.0 6.3
2002	1,220.4 1,306.9	5,785.9 6,073.7	20,710.2 22,420.4	3.2 7.1	6.5 5.0	7.3 8.1
2004	1,377.1	6,415.2	24,426.9	5.4	5.6	8.9
2005	1,375.3 1,367.9	6,679.2 7,079.5	26,756.1 29,151.3	1 5	4.1 6.0	9.5 9.0
2007	1,375.8 1,594.7	7,509.4 8,241.6	31,694.5 33.564.9	.6 15.9	6.1 9.8	8.7 5.9
2009	1,693.3	8,524.3		6.2	3.4	
2008: JanFeb	1,381.1 1.387.0	7,542.3 7,631.7		1.8	6.3 7.1	
Mar Apr	1,387.0 1,389.7 1,392.1	7,691.6 7,716.3	32,131.5	2.2 2.5 1.9	7.6 7.3	5.5
May	1,391.5 1.398.1	7,739.0 7.751.1	32,395.8	2.3	7.1 6.4	3.3
July	1,415.1	7.802.7		4.9	6.9	
Aug Sept	1,400.0 1,459.5	7,790.6 7,898.2	33,062.1	1.9 10.0	4.2 5.4	8.2
Oct Nov	1,472.7 1,518.1	8,014.7 8,065.3		11.6 18.2	7.7 8.4	
Dec	1,594.7	8,241.6	33,564.9	28.1	12.7	6.1
2009: Jan Feb	1,573.8 1,562.1	8,302.6 8,340.7		22.4 23.2	12.8 14.1	
Mar Apr	1,564.3 1,592.7	8,392.7 8,343.7	33,932.0	14.4 16.3	12.5 8.2	4.3
May	1,593.0	8,416.1		9.9	8.7	
June July	1,641.0 1,649.9	8,442.2 8,436.5	34,310.5	5.8 9.7	4.9 3.2	4.5
Aug Sept	1,648.3 1.660.8	8,413.2 8,452.3	34.551.9	11.0 12.3	1.7 1.4	2.8
Oct	1,673.8 1,685.6	8,481.3 8,508.9		10.2 11.6	3.3	
Nov Dec	1,693.3	8,524.3		6.4	1.9	

<sup>1</sup> Consists of outstanding credit market debt of the U.S. Government, State and local governments, and private nonfinancial sectors.
2 Money market mutual fund (MMMF), Money market deposit account (MMDA).
3 Annual changes are from December to December; monthly changes are from six months earlier at a simple annual rate.
4 Annual changes are from fourth quarter to fourth quarter. Quarterly changes are from previous quarter at annual rate.

Source: Board of Governors of the Federal Reserve System.

Note: The Federal Reserve no longer publishes the M3 monetary aggregate and most of its components. Institutional money market mutual funds is published as a memorandum item in the H.6 release, and the component on large-denomination time deposits is published in other Federal Reserve Board releases. For details, see H.6 release of March 23, 2006.

Table B-70. Components of money stock measures, 1970-2009

[Averages of daily figures; billions of dollars, seasonally adjusted]

	[Averages or dar	iy ilgures, billions	of dollars, season			
		Nonbank		Other	checkable deposits	(OCDs)
Year and month	Currency	travelers checks	Demand deposits	Total	At commercial banks	At thrift institutions
December:						
1970	48.6 52.0	0.9 1.0	164.7 175.1	0.1	0.0	0.1
1971 1972	56.2	1.2	191.6	.2 .2 .3	.0	.2
1973 1974	60.8 67.0	1.4 1.7	200.3 205.1	.3 .4	.0 .2	.2 .2 .3 .4 .5 1.4 2.3
1975	72.8	2.1	211.3	.9	.4	.5
1976 1977	79.5 87.4	2.6 2.9	221.5 236.4	2.7 4.2	1.3 1.8	1.4 2.3
1978	96.0	3.3 3.5	249.5	8.5	5.3 12.7	3.1 4.2
1979 1980	104.8 115.3	3.9	256.6 261.2	16.8 28.1	20.8	7.3
1981	122.5	4.1	231.4	78.7	63.0	15.6
1982 1983	132.5 146.2	4.1 4.7	234.1 238.5	104.1 132.1	80.5 97.3	23.6 34.8
1984 1985	156.1 167.7	5.0 5.6	243.4 266.9	147.1 179.5	104.7 124.7	42.4 54.9
1986	180.4	6.1	302.9	235.2	161.0	74.2
1987 1988	196.7 212.0	6.6 7.0	287.7 287.1	259.2 280.6	178.2 192.5	81.0 88.1
1989	222.3	6.9	278.6	285.1	197.4	87.7
1990 1991	246.5 267.1	7.7 7.7	276.8 289.6	293.7 332.5	208.7 241.6	85.0 90.9
1992	292.1	8.2	340.0	384.6	280.8	103.8
1993 1994	321.6 354.5	8.0 8.6	385.4 383.6	414.6 404.0	302.6 297.4	112.0 106.6
1995 1996	372.8 394.7	9.0 8.8	389.0 402.3	356.6 275.9	249.0 172.1	107.6 103.8
1997	425.4	8.4	393.8	245.2	148.3	96.9
1998 1999	460.5 517.9	8.5 8.6	376.7 352.9	250.0 243.3	143.9 139.7	106.1 103.7
2000	531.2	8.3	309.9	238.4	133.2	105.2
2001	581.1 626.3	8.0 7.8	335.7 306.8	257.4 279.6	142.0 154.3	115.4 125.3
2003	662.5 697.7	7.7	326.4	310.3	175.2 187.0	135.0
2004 2005	724.1	7.5 7.2	343.5 325.0	328.3 319.1	180.9	141.3 138.2
2006 2007	749.6 759.8	6.7 6.3	305.3 301.9	306.3 307.8	177.7 174.4	128.6 133.5
2008	815.3	5.5	459.7	314.3	180.2	134.1
2009 2008: Jan	862.1 757.2	5.1 6.2	441.7 306.7	384.5 311.0	233.9 175.6	150.6 135.4
Feb	757.0	6.2	310.8	313.0	177.2	135.9
Mar Apr	759.1 758.8	6.2 6.1	311.8 314.4	312.6 312.8	177.5 177.3	135.1 135.5
May	762.7 768.4	6.2 6.1	309.1 311.7	313.4 312.0	175.2 176.3	138.2 135.7
June July	774.9	5.9	320.8	313.5	175.8	137.7
Aug Sept	776.7 781.1	5.9 5.8	311.5 359.6	306.0 313.0	170.1 175.7	135.9 137.3
Oct	796.6	5.7	360.2	310.2	175.2	135.0
Nov Dec	806.3 815.3	5.6 5.5	399.6 459.7	306.6 314.3	171.5 180.2	135.1 134.1
2009: Jan	827.2	5.5	428.4	312.7	177.0	135.7
Feb Mar	836.8 842.9	5.5 5.4	397.3 390.5	322.4 325.5	182.2 184.5	140.3 141.0
Apr May	847.8 849.2	5.3 5.3	406.2 401.9	333.3 336.7	191.6 195.1	141.6 141.5
June	852.3	5.2	434.0	349.5	210.4	139.1
July Aua	854.2 857.7	5.1 5.1	435.7 426.9	354.9 358.6	215.2 219.1	139.8 139.5
Sept	861.4	5.1	430.4	363.9	222.2	141.7
Oct Nov	862.6 861.7	5.1 5.1	432.2 434.5	373.9 384.3	226.2 236.3	147.6 148.0
Dec	862.1	5.1	441.7	384.5	233.9	150.6

See next page for continuation of table.

Table B-70. Components of money stock measures, 1970-2009—Continued

[Averages of daily figures; billions of dollars, seasonally adjusted]

		avings deposits			nomination time			
Year and month	Total	At commercial banks	At thrift institutions	Total	At commercial banks	At thrift institutions	Retail money funds	Institutional money funds <sup>3</sup>
December:								
1970	261.0 292.2 321.4 326.8 338.6 388.9 453.2 492.2 481.9 423.8	98.6 112.8 124.8 128.0 136.8 161.2 201.8 218.8 216.5 195.0	162.3 179.4 196.6 198.7 201.8 227.6 251.4 273.4 265.4 228.8	151.2 189.7 231.6 265.8 287.9 337.9 390.7 445.5 521.0 634.3	79.3 94.7 108.2 116.8 123.1 142.3 155.5 167.5 185.1 235.5	71.9 95.1 123.5 149.0 164.8 195.5 235.2 278.0 335.8 398.7	0.0 .0 .0 .1 1.4 2.4 1.8 5.8 33.9	0.0 .0 .0 .2 .5 .6 1.0 3.5
1980 1981 1982 1983 1984 1985 1986 1987 1988	400.3 343.9 400.1 684.9 704.7 815.3 940.9 937.4 926.4 893.7	185.7 159.0 190.1 363.2 389.3 456.6 533.5 534.8 542.4 541.1	214.5 184.9 210.0 321.7 315.4 358.6 407.4 402.6 383.9 352.6	728.5 823.1 850.9 784.1 888.8 885.7 858.4 921.0 1,037.1 1,151.3	286.2 347.7 379.9 350.9 387.9 386.4 369.4 391.7 451.2 533.8	442.3 475.4 471.0 433.1 500.9 499.3 489.0 529.3 585.9 617.6	62.5 151.7 183.4 135.3 163.8 207.5 222.1 243.7 320.4	16.0 38.2 48.8 40.9 63.7 66.7 87.5 94.6 94.7
1990 1991 1992 1993 1994 1995 1996 1997 1998	922.9 1,044.5 1,187.2 1,219.3 1,151.3 1,275.2 1,402.1 1,605.3 1,739.2	581.3 664.8 754.2 785.3 752.8 774.8 906.4 1,023.2 1,188.7 1,288.2	341.6 379.6 433.1 434.0 398.5 361.0 368.9 378.9 416.6 451.0	1,173.3 1,065.3 867.7 781.5 817.5 932.4 947.9 967.6 951.3	610.7 602.2 508.1 467.9 503.6 575.8 594.2 625.5 626.4 636.9	562.6 463.1 359.7 313.6 313.9 356.5 353.7 342.2 324.9 318.3	356.0 370.2 350.4 350.3 377.0 444.7 514.8 590.4 723.9 817.5	141.6 190.9 215.4 219.9 214.8 268.0 328.6 403.1 555.2 660.7
2000 2001 2002 2003 2004 2005 2006 2007 2008	1,878.4 2,309.2 2,773.6 3,162.9 3,507.2 3,604.8 3,876.2 4,112.0 4,849.0	1,424.4 1,738.5 2,060.0 2,338.1 2,631.7 2,775.9 2,913.7 3,047.4 3,339.2 4,006.9	454.0 570.7 713.6 824.8 875.5 829.0 784.0 828.8 772.7 842.2	1,046.0 974.6 894.7 817.9 827.7 992.0 1,203.7 1,272.7 1,452.7	700.8 636.1 591.3 541.8 551.4 645.2 778.8 856.2 1,074.2 851.5	345.3 338.5 303.5 276.1 276.3 346.8 425.0 416.5 378.5 316.9	905.8 968.1 897.1 786.0 703.2 706.9 810.2 984.7 1,082.2 813.5	814.8 1,216.4 1,266.7 1,127.5 1,079.8 1,151.3 1,357.7 1,913.9 2,409.7 2,219.7
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	3,876.7 3,914.9 3,965.8 3,969.2 4,003.7 4,018.0 4,037.3 4,018.5 4,045.2 4,050.0 4,031.8 4,112.0	3,043.2 3,076.5 3,113.0 3,112.6 3,121.5 3,121.4 3,134.2 3,180.8 3,263.3 3,260.5 3,339.2	833.5 838.3 852.9 856.6 882.2 896.6 903.1 892.0 864.3 771.2 772.7	1,279.6 1,285.6 1,278.0 1,277.3 1,276.6 1,274.1 1,285.2 1,316.6 1,336.3 1,397.1 1,430.4 1,452.7	858.9 863.4 859.2 858.0 859.6 862.9 978.4 903.9 932.0 1,024.6 1,052.6	420.7 422.2 418.8 419.3 417.0 411.3 406.8 408.7 404.3 372.5 377.8 378.5	1,004.8 1,044.2 1,058.1 1,077.7 1,067.2 1,060.7 1,055.0 1,059.4 1,057.3 1,094.8 1,085.0	1,933.5 2,059.8 2,130.5 2,173.1 2,201.3 2,232.7 2,248.3 2,272.3 2,233.9 2,225.4 2,334.4 2,409.7
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	4,207.3 4,284.8 4,356.1 4,326.4 4,438.4 4,466.8 4,506.5 4,546.0 4,632.3 4,716.5 4,787.9 4,849.0	3,428.8 3,495.1 3,552.1 3,520.9 3,621.3 3,640.9 3,715.5 3,789.6 3,861.1 3,952.1 4,006.9	778.5 789.8 804.0 805.4 817.2 825.9 834.6 830.5 842.7 855.4 835.8	1,445.6 1,437.6 1,424.9 1,404.9 1,384.3 1,361.5 1,303.9 1,268.0 1,229.2 1,197.6	1,065.9 1,056.0 1,042.6 1,027.9 1,021.4 1,003.2 980.5 961.9 935.6 901.8 876.8	379.7 381.6 382.4 377.0 362.9 358.4 353.4 342.0 332.4 327.4 320.7 316.9	1,075.9 1,056.2 1,047.4 1,019.8 1,000.4 972.8 946.3 915.0 891.1 861.8 837.9	2,472.3 2,494.7 2,501.6 2,514.2 2,528.5 2,511.3 2,492.2 2,447.0 2,407.3 2,339.2 2,281.0 2,219.7

<sup>&</sup>lt;sup>1</sup> Savings deposits including money market deposit accounts (MMDAs); data prior to 1982 are savings deposits only.

Note: See also Table B-69.

Source: Board of Governors of the Federal Reserve System.

<sup>&</sup>lt;sup>2</sup> Small-denomination deposits are those issued in amounts of less than \$100,000.

 $<sup>^{3}</sup>$  Institutional money funds are not part of non-M1 M2.

Table B-71. Aggregate reserves of depository institutions and the monetary base, 1979-2009

[Averages of daily figures 1; millions of dollars; seasonally adjusted, except as noted]

	Adjus	ted for chan	ges in rese	rve requirer	nents <sup>2</sup>		E	Borrowings	from the Fe	deral Reserve (N	ISA) <sup>3</sup>	
	Reser	ves of depo	sitory instit	utions				(	ther borrow	rings from the Fe	ederal Reserve	5
Year and month	Total	Non- borrowed	Required	Excess (NSA) <sup>3</sup>	Monetary base	Total <sup>4</sup>	Term auction credit	Primary	Primary dealer and other broker- dealer credit <sup>6</sup>	Asset-backed commercial paper money market mutual fund liquidity facility	Credit extended to American Inter- national Group, Inc., net 7	Term asset- backed securities loan facility, net <sup>8</sup>
December:	20.720	10 240	20,279	442	101 140	1,473						
1979 1980	20,720 22,015	19,248 20,325	21,501	514	131,143 142,004	1,473						
1981	22.443	21.807	22.124	319	149,021	636						
1982 1983	23,600 25,367	22,966 24,593	23,100 24,806	500 561	160,127 175,467	634 774						
1984	26,913	23,727	26,078	835	187,252	3,186						
1985 1986	31,569 38,840	30,250 38,014	30,505 37,667	1,063 1,173	203,555 223,416	1,318 827						
1987	38,913	38,135	37,893	1,173	239,829	777						
1988 1989	40,453 40,486	38,738	39,392 39,545	1,061 941	256,897	1,716						
1909	41,766	40,221	40,101	1,665	267,774 293,278	265 326						
1991	45,516	41,440 45,324	44,526	990	317,543	192						
1992	54,421 60,566	54,298 60,484	53,267 59,497	1,154 1,069	350,882 386,586	124 82						
1993 1994	59,466	59,257	58,295	1,171	418,313	209						
1995	56,483	56,226	55,193	1,290 1,418	434,610	257						
1996 1997	50,185 46,875	50,030 46,551	48,766 45,189	1,410	452,088 479,996	155 324						
1998	45,172	45,055	43,659	1,512	513,954	9320						
1999 2000	42,173 38,724	41,852	40,879	1,294	593,740	210						
2001	41,428	38,515 41,361	37,399 39,785	1,325 1,643	584,984 635,567	67						
2002	1 40.339	40,259 42,585	38,331	2,008 1,047	681.648	80 46		17				
2003 2004	42,630 46,540	46.4/8	41,583 44,631	1,909	720,391 759,378	63		11				
2005	1 45.089	44,920 43,029	43,188	1,901	787.579	169 191		97 111				
2006 2007	43,220 43,214	27,783	41,357 41,429	1,863 1,784	812,411 824,373	15,431	11,613	3,787				
2008 2009	820,306 1,138,633	166,740 968,706	52,972 63,187	767,333 1,075,446	1,654,068	653,565 169,927	438,327 82,014	88,245 19,025	47,631 0	32,102 0	47,206 22,023	46,310
2008: Jan	42.289	-3,371 -16,760	40.641	1,648	820,299 820,953 824,824 823,692 827,435 833,059 839,687 843,236 905,225 1,130,444 1,435,013	45.659	44.516	1,137				
Feb Mar	43,397	-16,760	41,782	1,615 2,644	820,953	60,157 94,524	60,000 75,484	155 1,617	16 160			
Apr	45,119 44,789	-49,405 -90,620	42,474 43,052	1.737	823,692	135.410	100,000	9,624	16,168 25,764 14,238			
May June	45,708	1 _110 073	43,869	1,838	827,435	155,780	127,419 150,000	14,076	14,238			
July	45,674 45,274 46,258	-125,604 -120,390 -121,821	43,449 43,361	2,225 1,913	839,687	171,278 165,664	150,000	14,225 15,204 17,980	6,908 255			
Aug Sept	46,258	-121,821 -186,522	44,382 44,101	1,876	843,236	168,078 290,105	150,000	17,980	53 473	21 977	22 197	
Oct	315,458	-186,522 -332,861 -89,480	48,299	267,159	1,130,444	648,319 698,786	244,778	32,632 94,017	53,473 114,953 60,655	31,877 117,457 71,009	22,187 77,047	
Nov Dec	103,583 315,458 609,305 820,306	-89,480 166,740	48,299 50,484 52,972	59,483 267,159 558,821 767,333	1,435,013 1,654,068	698,786	149,814 244,778 393,088 438,327	95,839 88,245	60,655 47,631	71,009 32,102	78,070 47,206	
2009: Jan	856,993	293,496	58,813	798,180	1,702,465	563,496	403,523	70,436	33,061	17,745	38,690	
Feb	699.935	117 438	56.486	643,449	1.555.039	582.497	438.822	65,463	26 250	13.533	38,414	
Mar Apr	779,497 881,019	167,385 322,825	54,891 56,658	724,605 824,362	1,640,732 1,747,298	612,111 558,194	477,049 444,933	62,513 47,324	20,292 10,918	7,857 4,267	43,328 45,057	1,061 5,649
May	900.866	375,418	56.797	844.068	1.768.832	525.448	403,970	40.124	701	23,347 18,891	44.915	12.367
June July	809,196 794,995	370,473 428,033	57,840 62,015	751,355 732,980	1,679,687 1,666,475	438,722 366,961	316,868 255,119	37,302 34,366	0	18,891 6,230	43,057 43,108	22,552 27,993
Aug	828.466	497,017	62,639	765,827	1.703.377	331,450	224.490	32.147	0	184	40,021	33 898
Sept Oct	922,473 1,056,405	615,646 791,347	62,408 61,673	860,065 994,732	1,800,961 1,936,564	306,827 265,058	196,731 155,396	29,243 25,163	0	79 28	39,074 41,222	41,036 42,765
Nov	1,140,488	923,181	63,200	1,077,288	2,018,813	217,307	110,049	20,434	0	0	43,222	43,497
Dec	1,138,633	968,706	63,187	1,075,446	2,017,698	169,927	82,014	19,025	0	0	22,023	46,310

<sup>&</sup>lt;sup>1</sup> Data are prorated averages of biweekly (maintenance period) averages of daily figures.

Source: Board of Governors of the Federal Reserve System.

<sup>&</sup>lt;sup>2</sup> Aggregate reserves incorporate adjustments for discontinuities associated with regulatory changes to reserve requirements. For details on aggregate reserves series see Federal Reserve Bulletin.

<sup>3</sup> Not seasonally adjusted (NSA).

<sup>4</sup> Includes secondary, seasonal, other credit extensions, and adjustment not shown separately.

<sup>5</sup> Does not include credit extensions made by the Federal Reserve Bank of New York to Maiden Lane LLC, Maiden Lane II LLC, Maiden Lane III LLC, and Commercial Paper Funding Facility LLC.

<sup>&</sup>lt;sup>6</sup> Includes credit extended through the Primary Dealer Credit Facility and credit extended to certain other broker-dealers.

<sup>7</sup> Includes outstanding principal and capitalized interest net of unamortized deferred commitment fees and allowance for loan restructuring. Excludes credit extended to consolidated LLCs as described in footnote 5.

<sup>&</sup>lt;sup>8</sup> Includes credit extended by Federal Reserve Bank of New York to eligible borrowers through the Term Asset-Backed Securities Loan Facility, net of unamortized deferred administrative fees.

<sup>&</sup>lt;sup>9</sup> Total includes borrowing under the terms and conditions established for the Century Date Change Special Liquidity Facility in effect from October 1, 1999 through April 7, 2000.

TABLE B-72. Bank credit at all commercial banks, 1972-2009

[Monthly average; billions of dollars, seasonally adjusted 1]

		Securit	ies in bank (	credit <sup>2</sup>			Loans an	d leases in b	ank credit		
	Total		U.S.		Tabal	Com-	Re	al estate loa	ans		046
Year and month	bank credit	Total secu- rities	Treasury and agency secu- rities	Other secu- rities	Total loans and leases <sup>3</sup>	mercial and industrial loans	Total <sup>4</sup>	Revolving home equity loans	Com- mercial loans <sup>5</sup>	Con- sumer loans <sup>6</sup>	Other loans and leases <sup>7</sup>
December:  1972  1973  1974  1975  1976  1977  1977  1978  1979  1980  1981  1982  1982  1983  1984  1985  1986  1987  1989  1990  1991  1992  1993  1994  1995  1996  1997  1998  1999  2000  2001  2002  2003  2004  2005  2006  2007  2008  2009  2008  2009  2008  2009  2008  Apr  May  June  July  Aug  Sept	561.8 643.1 707.5 737.8 885.6 1,003.8 1,119.0 1,217.8 1,298.6 1,398.5 2,291.3 2,405.7 2,569.7 2,704.9 2,815.8 2,916.1 3,070.5 3,238.2 3,470.8 3,470.8 4,359.6 4,359.6 6,563.7 5,210.2	159.7 166.9 172.1 204.9 226.7 234.3 240.2 258.5 294.2 307.6 334.5 503.0 503.0 503.0 503.0 503.0 503.0 503.0 503.0 1,147.6 891.3 889.1 891.3 889.1 891.3 889.1 1,147.6 1,509.6 1,147.6 1,509.6 1,147.6 1,509.6 1,147.6 2,080.0 2,080.0 2,080.2 2,080.0 2,080.3 2,080.0 2,080.3 2,080.3 2,080.0 2,080.3 2,080.3 2,080.3 2,080.3 2,080.3 2,080.0 2,080.3 2,080.3 2,080.0 2,080.0 2,080.3 2,080.0	86.9 90.1 181.1 137.5 138.3 146.8 172.2 180.5 203.2 261.2 260.2 261.2 260.5 271.5 309.7 335.6 458.5 560.0 661.3 725.0 713.6 693.4 746.4 790.7 805.2 781.6 840.6 1.007.0 1.139.8 1.188.6 1.107.6 1.105.5 1.1139.8 1.240.3 1.424.8 1.093.7 1.192.1 1.151.1	72.8 76.8 83.9 86.8 101.9 127.0 127.0 127.0 137.5 140.7 178.5 193.3 164.5 157.3 166.3 175.5 195.3 238.4 410.0 479.0 685.2 774.0 975.6 889.1 974.5 981.7 981.	402.0 476.2 535.4 532.9 571.9 651.3 763.6 860.5 923.7 991.1 1,063.9 91.151.5 1,314.1 1,581.7 1,701.6 1,858.0 2,000.3 2,095.1 2,179.2 2,349.1 2,179.2 2,349.1 2,179.2 2,349.1 2,975.0 3,270.0 3,458.1 3,830.6 4,133.1 4,374.2 4,835.5 5,433.6 6,760.3 6,739.6 6,884.1 6,965.1 6,936.4 6	133.1 161.2 191.3 183.4 185.2 204.7 237.2 279.6 350.2 392.0 413.8 472.8 499.8 499.8 499.8 638.2 617.6 638.2 715.2 778.4 845.2 778.4 845.2 778.4 845.2 938.1 1,021.8 999.6 1,031.8 1,02	96.9 117.0 129.8 134.1 148.5 175.1 210.5 241.7 262.3 283.6 299.7 330.4 493.3 565.0 760.0 841.7 869.1 87.9 929.9 98.6 1.121.9 1.220.4 1.456.8 1.637.1 1.754.3 2.007.2 2.209.7 2.507.2 3.355.8 3.664.5 3.664.5 3.670.9 3.700.9 3	30.8 40.0 50.4 70.5 73.3 75.2 79.1 85.4 98.1 96.2 99.5 129.5 152.3 211.7 278.4 466.8 483.2 442.9 466.8 483.0 503.0 508.6 501.5 508.6 501.5 508.6 501.5 508.6 501.5 508.6 501.5 508.6 501.5 508.6 501.5 502.6	1,077.7 1,266.6 1,454.3 1,589.5 1,726.8 1,648.1 1,603.6 1,618.4 1,631.6 1,640.4 1,640.3 1,640.6 1,660.7	85.3 98.4 102.1 104.3 115.8 138.0 164.4 183.7 178.6 182.0 187.6 294.4 315.2 327.8 355.3 375.5 363.6 355.3 375.5 363.6 355.3 375.5 363.6 355.3 375.5 363.6 355.3 375.5 375.6 363.6 355.3 375.6 375.	86.8 99.7 112.2 111.1 122.3 133.5 151.5 170.8 175.2 184.6 194.7 211.6 232.5 236.6 221.4 233.3 231.3 231.3 231.3 231.3 231.3 231.6 252.5 25
Oct	9,541.2 9,406.2 9,372.5 9,337.1 9,347.6 9,328.6 9,266.9 9,338.1	2,231.5 2,166.8 2,109.4 2,145.7 2,162.6 2,187.2 2,185.0 2,210.7	1,217.6 1,252.5 1,240.3 1,273.0 1,261.7 1,273.0 1,263.8 1,263.2	1,013.9 914.3 869.1 872.7 900.8 914.2 921.2 947.5	7,309.7 7,239.4 7,263.1 7,191.4 7,185.0 7,141.4 7,081.9 7,127.4	1,645.6 1,636.9 1,617.7 1,601.1 1,587.1 1,564.1 1,545.0	3,822.0 3,820.4 3,823.2 3,805.0 3,818.2 3,836.1 3,831.4 3,875.6	578.4 582.6 588.0 593.0 595.7 600.2 605.1 613.1	1,719.2 1,723.6 1,726.8 1,720.8 1,721.6 1,720.3 1,715.6 1,712.2	852.6 858.1 861.4 869.8 879.9 870.6 859.7	989.5 923.9 960.8 915.6 899.7 870.6 845.8 868.1
June July Aug Sept Oct Nov Dec	9,319.6 9,249.6 9,210.4 9,126.9 9,046.3 9,103.7 9,082.1	2,252.5 2,268.1 2,304.0 2,314.1 2,305.0 2,309.8 2,342.5	1,293.5 1,325.5 1,363.1 1,379.4 1,372.1 1,382.9 1,424.8	959.0 942.6 940.8 934.7 932.8 926.9 917.7	7,067.1 6,981.5 6,906.5 6,812.8 6,741.4 6,793.8 6,739.6	1,499.0 1,482.8 1,450.7 1,414.7 1,383.5 1,366.0 1,343.0	3,862.5 3,846.8 3,825.5 3,781.9 3,757.3 3,823.0 3,809.0	610.9 608.3 606.9 604.0 601.8 604.6 601.7	1,704.6 1,697.8 1,690.5 1,679.8 1,667.1 1,660.6 1,648.1	856.2 852.6 850.5 848.0 846.6 842.2 832.6	849.4 799.3 779.8 768.2 754.0 762.7 755.0

<sup>1</sup> Data are prorated averages of Wednesday values for domestically chartered commercial banks, branches and agencies of foreign banks, New York State

Note: Data in this table are shown as of January 22, 2010. Source: Board of Governors of the Federal Reserve System.

and are profiled averages of wednesday studies for domestically chartered confinercial banks, prainties and agencies of foreign banks, new fork state investment companies (through September 1996), and Edge Act and agreement corporations.

Includes securities held in trading accounts, held-to-maturity, and available for sale. Excludes all non-security trading assets, such as derivatives with a positive fair value or loans held in trading accounts.

Securities unearmed income, Includes the allowance for loan and lease losses. Excludes Federal funds sold to, reverse repurchase agreements (RPs) with, and loans to commercial banks. Includes all loans held in trading accounts under a fair value option.

<sup>4</sup> Includes closed-end residential loans, not shown separately.

<sup>5</sup> Includes construction, land development, and other land loans, and loans secured by farmland, multifamily (5 or more) residential properties, and nonfarm nonresidential properties.

<sup>6</sup> Includes credit cards and other consumer loans.

<sup>&</sup>lt;sup>7</sup> Includes other items, not shown separately.

TABLE B-73. Bond yields and interest rates, 1929-2009

[Percent per annum]

		II C T	roacury coo	urition		Croone pe	ailliulli,						
Year and	Bi (at au	ills ction) <sup>1</sup>	reasury sec	Constant maturities	2	Corpi bor (Mod	nds	High- grade muni- cipal	New- home mort-	Prime rate charged	Discount (Federal Re of New	t window eserve Bank York) <sup>5, 6</sup>	Federal funds
month	3-month	6-month	3-year	10-year	30-year	Aaa <sup>3</sup>	Baa	bonds (Stand- ard & Poor's)	gage yields <sup>4</sup>	by banks 5	Primary credit	Adjust- ment credit	rate 7
1929						4.73	5.90	4.27		5.50-6.00		5.16	
1933	0.515					4.49	7.76	4.71		1.50-4.00		2.56	
1939	.023					3.01	4.96	2.76		1.50		1.00	
1940 1941	.014 .103					2.84 2.77	4.75 4.33	2.50 2.10		1.50 1.50		1.00 1.00	
1942	.326					2.83	4.28	2.36		1.50		81.00	
1943 1944	.373 .375					2.73 2.72	3.91 3.61	2.06 1.86		1.50 1.50		<sup>8</sup> 1.00 <sup>8</sup> 1.00	
1945 1946	.375					2.62	3.29	1.67 1.64		1.50		81.00 81.00	
1947	.594					2.53 2.61	3.05 3.24	2.01		1.50 1.50–1.75		1.00	
1948 1949	1.040 1.102					2.82 2.66	3.47 3.42	2.40 2.21		1.75–2.00		1.34 1.50	
1950	1.218					2.62	3.24	1.98		2 07		1.59	
1951	1.552					2.86	3.41	2.00		2.56 3.00		1.75	
1952 1953	1.766 1.931		2.47	2.85		2.96 3.20	3.52 3.74	2.19 2.72		3.00		1.75 1.99	
1954 1955	.953 1.753		1.63 2.47	2.40 2.82		2.90 3.06	3.51 3.53	2.37 2.53		3.05 3.16		1.60 1.89	1.79
1956	2.658		3.19	3.18		3.36	3.88	2.93		3.77		2.77	2.73
1957 1958	3.267 1.839		3.98 2.84	3.65 3.32		3.89 3.79	4.71 4.73	3.60 3.56		4.20 3.83		3.12 2.15	3.11 1.57
1959	3.405	3.832	4.46	4.33		4.38	5.05	3.95		4.48		3.36	3.31
1960	2.93	3.25 2.61	3.98	4.12		4.41	5.19	3.73		4.82 4.50		3.53	3.21
1961 1962	2.38 2.78	2.91	3.54 3.47	3.88 3.95		4.35 4.33	5.08 5.02	3.46 3.18		4.50		3.00 3.00	1.95 2.71
1963 1964	3.16 3.56	3.25 3.69	3.67 4.03	4.00 4.19		4.26 4.40	4.86 4.83	3.23 3.22	5.89 5.83	4.50 4.50		3.23 3.55	3.18 3.50
1965	3.95	4.05	4.22	4.28		4.49	4.87	3.27	5.81	4.54		4.04	4.07
1966 1967	4.88 4.32	5.08 4.63	5.23 5.03	4.93 5.07		5.13 5.51	5.67 6.23	3.82 3.98	6.25 6.46	5.63 5.63		4.50 4.19	5.11 4.22 5.66
1968	5.34	5.47	5.68	5.64		6.18	6.94	4.51	6.97	6.31		5.17	5.66
1969 1970	6.68	6.85 6.53	7.02 7.29	6.67 7.35		7.03 8.04	7.81 9.11	5.81	7.81 8.45	7.96 7.91		5.87 5.95	8.21 7.17
1971	4.35	4.51	5.66	6.16		7.39	8.56	6.51 5.70	7.74	5.73		4.88	4.67
1972 1973	4.07 7.04	4.47 7.18	5.72 6.96	6.21 6.85		7.21 7.44	8.16 8.24	5.27 5.18	7.60 7.96	5.25 8.03		4.50 6.45	4.44 8.74
1974	7.89	7.93	7.84	7.56		8.57	9.50	6.09	8.92	10.81		7.83	10.51
1975 1976	5.84 4.99	6.12 5.27	7.50 6.77	7.99 7.61		8.83 8.43	10.61 9.75	6.89 6.49	9.00 9.00	7.86 6.84		6.25 5.50	5.82 5.05
1977	5.27	5.52	6.68	7.42	7.75	8.02	8.97	5.56	9.02	6.83		5.46	5.54
1978 1979	7.22 10.05	7.58 10.02	8.29 9.70	8.41 9.43	8.49 9.28	8.73 9.63	9.49 10.69	5.90 6.39	9.56 10.78	9.06 12.67		7.46 10.29	7.94 11.20
1980	11.51	11.37	11.51	11.43	11.27	11.94	13.67	8.51	12.66	15.26		11.77	13.35
1981 1982	14.03 10.69	13.78 11.08	14.46 12.93	13.92 13.01	13.45 12.76	14.17 13.79	16.04 16.11	11.23 11.57	14.70 15.14	18.87 14.85		13.42 11.01	16.39 12.24
1983	8.63	8.75	10.45	11.10	11.18	12.04	13.55	9.47	12.57	10.79		8.50	9.09
1984 1985	9.53 7.47	9.77 7.64	11.92 9.64	12.46 10.62	12.41 10.79	12.71 11.37	14.19 12.72	10.15 9.18	12.38 11.55	12.04 9.93		8.80 7.69	10.23 8.10
1986 1987	5.98 5.82	6.03 6.05	7.06 7.68	7.67 8.39	7.78 8.59	9.02 9.38	10.39 10.58	7.38 7.73	10.17	8.33 8.21		6.32 5.66	6.80
1988	6.69	6.92	8.26	8.85	8.96	9.71	10.83	7.76	9.31 9.19 10.13	9.32		6.20	6.66 7.57
1989	8.12	8.04	8.55	8.49	8.45	9.26	10.18	7.24		10.87		6.93	9.21
1990 1991	7.51 5.42	7.47 5.49	8.26 6.82	8.55 7.86	8.61 8.14	9.32 8.77	10.36 9.80	7.25 6.89	10.05 9.32	10.01 8.46		6.98 5.45	8.10 5.69
1992	3.45	3.57	5.30	7.01	7.67	8.14	8.98 7.93	6.41	9.32 8.24	6.25		3.25	5.69 3.52 3.02
1993 1994	3.02 4.29	3.14 4.66	4.44 6.27	5.87 7.09	6.59 7.37	7.22 7.96	8.62	5.63 6.19	7.20 7.49	6.00 7.15		3.00 3.60	4.21
1995 1996	5.51 5.02	5.59 5.09	6.25 5.99	6.57 6.44	6.88 6.71	7.59 7.37	8.20 8.05	5.95 5.75	7.87 7.80	8.83 8.27		5.21 5.02	5.83 5.30
1997	5.07	5.18	6.10	6.35	6.61	7.26	7.86	5.55	7.71	8.44		5.00	5.46
1998 1999	4.81 4.66	4.85 4.76	5.14 5.49	5.26 5.65	5.58 5.87	6.53 7.04	7.22 7.87	5.12 5.43	7.07 7.04	8.35 8.00		4.92 4.62	5.46 5.35 4.97
2000	5.85	5.92	6.22	6.03	5.94	7.62	8.36	5.77	7.52	9.23		5.73	6.24
2001	3.44 1.62	3.39 1.69	4.09	5.02 4.61	5.49 5.43	7.08	7.95	5.19	7.00	6.91 4.67		3.40	3.88 1.67
2003	1.01	1.06	3.10 2.10	4.01	5.43	6.49 5.67	7.80 6.77	5.05 4.73	6.43 5.80	4.12	2.12	1.17	1.13
2004	1.38 3.16	1.57 3.40	2.78	4.27 4.29		5.63 5.24	6.39 6.06	4.63 4.29	5.77 5.94	4.34 6.19	2.34 4.19		1.35 3.22
2006	4.73	4.80	3.93 4.77	4.80	4.91	5.59	6.48	4.42	6.63	7.96	5.96		4.97
2007	4.41 1.48	4.48 1.71	4.35 2.24	4.63 3.66	4.84 4.28	5.56 5.63	6.48 7.45	4.42 4.80	6.41 6.05	8.05 5.09	5.86 2.39		4.97 5.02 1.92
2009	.16	.29	1.43	3.26	4.08	5.31	7.30	4.64	5.14	3.25	.50		.16

<sup>&</sup>lt;sup>1</sup> High bill rate at auction, issue date within period, bank-discount basis. On or after October 28, 1998, data are stop yields from uniform-price auctions. Before that date, they are weighted average yields from multiple-price auctions.

See next page for continuation of table.

TABLE B-73. Bond yields and interest rates, 1929-2009—Continued

[Percent per annum]

	Bi	U.S. Tr	easury sec	urities Constant		Corpo bor (Mod	nds	High- grade muni-	New- home	Prime rate	(Federal Re	window serve Bank York) <sup>5, 6</sup>	Federal
Year and month	(at aud	ction) <sup>1</sup>		maturities ?	2	(IVIOC	uy oj	cipal bonds	mort-	charged	OT NCW	TOTK)	funds
	3-month	6-month	3-year	10-year	30-year	Aaa <sup>3</sup>	Baa	(Stand- ard & Poor's)	gage yields <sup>4</sup>	by banks <sup>5</sup>	Primary credit	Adjust- ment credit	rate <sup>7</sup>
										High-low	High-low	High-low	
2005: Jan	2.32 2.53 2.75 2.78 2.85 2.98 3.21 3.45 3.46 3.70 3.90 3.89	2.60 2.76 3.00 3.06 3.10 3.13 3.41 3.67 3.68 3.98 4.16 4.19	3.39 3.54 3.91 3.79 3.72 3.69 3.91 4.08 3.96 4.29 4.43 4.39	4.22 4.17 4.50 4.34 4.14 4.00 4.18 4.26 4.20 4.46 4.54 4.47		5.36 5.20 5.40 5.33 5.15 4.96 5.06 5.09 5.13 5.35 5.42 5.37	6.02 5.82 6.06 6.05 6.01 5.86 5.95 5.96 6.03 6.30 6.39 6.32	4.28 4.14 4.42 4.31 4.16 4.08 4.15 4.21 4.28 4.49 4.53 4.43	6.01 5.75 5.82 5.84 5.82 5.76 5.76 5.83 5.99 6.03 6.20 6.39	5.25–5.25 5.50–5.25 5.75–5.50 5.75–5.75 6.00–5.75 6.25–6.00 6.25–6.25 6.50–6.25 6.75–6.50 6.75–6.75 7.00–7.00 7.25–7.00	3.25-3.25 3.50-3.25 3.75-3.50 3.75-3.75 4.00-3.75 4.25-4.25 4.50-4.25 4.75-4.50 4.75-4.75 5.00-5.00 5.25-5.00		2.28 2.50 2.63 2.79 3.00 3.04 3.26 3.50 3.50 3.78 4.00 4.16
2006: Jan	4.20 4.41 4.51 4.59 4.72 4.79 4.96 4.98 4.82 4.89 4.95 4.84	4.29 4.51 4.61 4.71 4.81 4.95 5.09 4.99 4.90 4.91 4.95 4.87	4.35 4.64 4.74 4.89 4.97 5.09 5.07 4.85 4.69 4.72 4.64 4.58	4.42 4.57 4.72 4.99 5.11 5.09 4.88 4.72 4.73 4.60 4.56	4.54 4.73 5.06 5.20 5.15 5.13 5.00 4.85 4.85 4.69 4.68	5.29 5.35 5.84 5.95 5.89 5.68 5.51 5.51 5.33 5.32	6.24 6.27 6.41 6.68 6.75 6.78 6.76 6.59 6.43 6.42 6.20 6.22	4.31 4.41 4.60 4.61 4.64 4.43 4.30 4.32 4.17 4.17	6.12 6.40 6.53 6.64 6.69 6.79 6.81 6.87 6.69 6.55 6.37	7.50-7.25 7.50-7.50 7.75-7.50 7.75-7.75 8.00-7.75 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25	5.50-5.25 5.50-5.50 5.75-5.50 5.75-5.75 6.00-5.75 6.25-6.25 6.25-6.25 6.25-6.25 6.25-6.25 6.25-6.25 6.25-6.25 6.25-6.25		4.29 4.49 4.59 4.79 4.94 4.99 5.24 5.25 5.25 5.25 5.25
2007: Jan	4.96 5.02 4.96 4.87 4.77 4.63 4.83 4.34 4.01 3.96 3.49 3.08	4.93 4.96 4.90 4.87 4.80 4.77 4.85 4.56 4.13 4.08 3.63 3.29	4.79 4.75 4.51 4.60 4.69 5.00 4.82 4.34 4.06 4.01 3.35 3.13	4.76 4.72 4.56 4.69 4.75 5.10 5.00 4.67 4.52 4.53 4.15	4.85 4.82 4.72 4.87 4.90 5.20 5.11 4.93 4.79 4.77 4.52 4.53	5.40 5.39 5.47 5.47 5.79 5.79 5.74 5.66 5.44 5.49	6.34 6.28 6.27 6.39 6.70 6.65 6.65 6.48 6.40 6.65	4.29 4.21 4.18 4.32 4.37 4.64 4.73 4.57 4.41 4.45 4.22	6.35 6.31 6.22 6.21 6.22 6.54 6.70 6.73 6.58 6.55 6.42 6.21	8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-8.25 8.25-7.75 7.75-7.50 7.50-7.50	6.25-6.25 6.25-6.25 6.25-6.25 6.25-6.25 6.25-6.25 6.25-6.25 6.25-5.75 5.75-5.25 5.25-5.00 5.00-5.00		5.25 5.26 5.26 5.25 5.25 5.25 5.02 4.94 4.76 4.49 4.24
2008: Jan	2.86 2.21 1.38 1.32 1.71 1.89 1.72 1.79 1.46 .84 .30	2.84 2.09 1.53 1.54 1.82 2.15 1.99 1.96 1.78 1.39 .86	2.51 2.19 1.80 2.23 2.69 3.08 2.87 2.70 2.32 1.86 1.51	3.74 3.74 3.51 3.68 3.88 4.10 4.01 3.89 3.69 3.81 3.53 2.42	4.33 4.52 4.39 4.44 4.60 4.69 4.57 4.50 4.27 4.17 4.00 2.87	5.33 5.51 5.55 5.57 5.68 5.67 5.64 5.65 6.28 6.12 5.05	6.54 6.82 6.89 6.97 6.93 7.07 7.16 7.15 7.31 8.88 9.21 8.43	4.00 4.35 4.67 4.43 4.34 4.48 4.90 5.03 5.68 5.28 5.53	6.02 5.96 5.92 5.98 6.01 6.13 6.29 6.33 6.09 6.10 6.16 5.67	7.25-6.00 6.00-6.00 6.00-5.25 5.25-5.00 5.00-5.00 5.00-5.00 5.00-5.00 5.00-5.00 5.00-4.00 4.00-4.00 4.00-3.25	4.75–3.50 3.50–3.50 3.50–2.50 2.50–2.25 2.25–2.25 2.25–2.25 2.25–2.25 2.25–2.25 2.25–2.25 1.25–1.25 1.25–0.50		3.94 2.98 2.61 2.28 1.98 2.00 2.01 2.00 1.81 .97 .39
2009: Jan	.12 .31 .25 .17 .19 .17 .19 .18 .18 .08 .06	.31 .46 .43 .37 .31 .32 .29 .27 .22 .17 .16	1.13 1.37 1.31 1.32 1.39 1.76 1.55 1.65 1.48 1.46 1.32	2.52 2.87 2.82 2.93 3.29 3.72 3.56 3.59 3.40 3.39 3.40 3.59	3.13 3.59 3.64 3.76 4.23 4.52 4.41 4.37 4.19 4.19 4.31 4.49	5.05 5.27 5.50 5.39 5.54 5.61 5.26 5.13 5.15 5.19 5.26	8.14 8.08 8.42 8.39 8.06 7.50 7.09 6.58 6.31 6.29 6.32 6.37	5.13 5.00 5.15 4.88 4.60 4.84 4.58 4.13 4.20 4.35 4.16	5.11 5.09 5.10 4.96 4.92 5.17 5.40 5.32 5.26 5.14 5.08 5.01	3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25 3.25-3.25	0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50 0.50-0.50		.15 .22 .18 .15 .18 .21 .16 .16 .15 .12 .12

<sup>&</sup>lt;sup>2</sup> Yields on the more actively traded issues adjusted to constant maturities by the Department of the Treasury. The 30-year Treasury constant maturity series was discontinued on February 18, 2002, and reintroduced on February 9, 2006.
<sup>3</sup> Beginning with December 7, 2001, data for corporate Aaa series are industrial bonds only.

<sup>\*</sup> Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assuming, on the average, repayment at end of 10 years. Rates beginning with January 1973 not strictly comparable with prior rates.

5 For monthly data, high and low for the period. Prime rate for 1929–1933 and 1947–1948 are ranges of the rate in effect during the period.

6 Primary credit replaced adjustment credit as the Federal Reserve's principal discount window lending program effective January 9, 2003.

<sup>7</sup> Since July 19, 1975, the daily effective rate is an average of the rates on a given day weighted by the volume of transactions at these rates. Prior to that date, the daily effective rate was the rate considered most representative of the day's transactions, usually the one at which most transactions occurred.

<sup>&</sup>lt;sup>8</sup> From October 30, 1942 to April 24, 1946, a preferential rate of 0.50 percent was in effect for advances secured by Government securities maturing in one

Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Housing Finance Agency, Moody's Investors Service, and Standard & Poor's.

Table B-74. Credit market borrowing, 2001-2009

Item	2001	2002	2003	2004	2005	2006	2007	2008
NONFINANCIAL SECTORS								
Domestic	1,151.9	1,408.0	1,677.7	1,991.7	2,329.2	2,398.5	2,536.7	1,870.4
By instrument	1,151.9	1,408.0	1,677.7	1,991.7	2,329.2	2,398.5	2,536.7	1,870.4
Commercial paper Treasury securities	-83.1 -5.1	-57.9 257.1	-37.3 398.4	15.3 362.5	-7.7 307.3	22.4 183.7	11.3 237.5	1,239.0
Agency- and GSE-backed securities 1	-0.5	.5	-2.4	6	4	3	4	.2
Municípal securities Corporate bonds	122.8 343.4	159.4 133.4	137.6 152.2	130.5 75.5	195.0 56.7	177.4 215.6	215.6 311.2	65.4 204.6
Bank loans n.e.c.	-87.5	-108.2	-76.3	5.2	134.5	175.3	240.2	192.6
Other loans and advances	6.1 705.4	29.6 888.9	10.2 989.9	60.0 1,226.3	120.1 1,423.6	142.4 1,386.7	318.4 1,066.0	40.6 80.2
Home Multifamily residential	552.0 40.6	754.7 37.3	812.3 71.4	1,014.7 49.6	1,108.6 70.9	1,059.8 55.1	695.7 103.0	-115.7 58.8
Commercial	109.1	90.1	118.5	149.5	235.0	268.5	262.7	119.1
Farm	3.8 150.6	6.9 105.2	-12.2 105.5	12.5 117.0	9.1 100.3	3.3 95.3	4.6 136.9	18.0 40.2
By sector	1.151.9	1.408.0	1.677.7	1.991.7	2.329.2	2.398.5	2.536.7	1.870.4
Household sector	672.0	825.3	995.9	1,049.6	1,168.1	1,176.0	861.3	37.0
Nonfinancial business	380.0 211.9	181.0 23.0	165.7 86.8	464.7 203.8	682.5 333.7	887.9 465.1	1,252.3 783.0	551.0 347.7
Nonfarm noncorporate	161.7	150.8	91.5	245.2	331.6	408.6	454.8	202.2
FarmState and local governments	6.4 105.5	7.1	-12.6 120.1	15.8 115.4	17.3 171.7	14.2 151.2	14.6 185.9	1.1 43.3
Federal Government	-5.6	257.6	396.0	361.9	306.9	183.4	237.1	1,239.2
Foreign borrowing in the United States	-11.2 18.3	93.4 58.8	43.0 18.9	155.3 69.2	113.0 38.6	332.6 98.4	170.3 -69.3	-129.5 -71.0
Bonds	-18.5	31.6	28.7	85.8	64.5	227.8	218.7	-62.1
Bank loans n.e.c. Other loans and advances	-7.3 -3.8	5.3 -2.3	-2.5 -2.1	3.8 -3.6	14.5 -4.6	13.8 -7.4	24.1 -3.2	5.1 -1.5
Nonfinancial domestic and foreign borrowing	1,140.8	1,501.3	1,720.7	2,146.9	2,442.3	2,731.1	2,707.0	1,740.9
FINANCIAL SECTORS								
By instrument	874.7 -126.9	876.5 -99.9	1,066.7	979.8	1,118.5	1,291.0	1,791.9	888.5
Open market paperGSE issues <sup>1</sup>	304.1	219.8	-63.5 250.9	21.7 75.0	214.2 -84.0	196.3 35.6	-111.4 282.4	-125.6 271.7
Agency- and GSE-backed mortgage pool securities 1 Corporate bonds	338.5 310.2	326.8 388.7	330.6 487.1	47.9 669.6	167.3 743.8	295.4 798.2	626.3 693.3	497.3 -291.1
Bank loans n.e.c.	21.0	23.1	21.4	66.0	18.8	-62.3	70.9	496.1
Other loans and advances Mortgages	25.5 2.2	6.8	31.2 8.9	74.1 25.5	44.4 14.1	21.2 6.6	225.8 4.7	33.3 6.8
By sector	874.7	876.5	1,066.7	979.8	1,118.5	1,291.0	1,791.9	888.5
Commercial banking	52.9	49.7	48.5	78.4	85.1	177.4	263.2	161.1
U.Schartered commercial banks Foreign banking offices in the United States	30.2 -0.9	29.9 4	13.2 1	18.7	36.9 .0	107.5 3	131.8 .0	79.1 2
Bank holding companies	23.6 0.0	20.3 -23.1	35.4 35.3	59.5 91.4	48.2 22.5	70.2 -108.2	131.3 104.1	82.3 -67.1
Credit unions	1.5	2.0	2.2	2.3	3.3	4.2	13.4	8.3
Life insurance companies	0.6 304.1	2.0 219.8	2.9 250.9	3.0 75.0	.4 –84.0	2.7 35.6	14.5 282.4	26.2 271.7
Agency- and GSE-backed mortgage pools 1	338.5	326.8	330.6	47.9	167.3	295.4	626.3	497.3
Asset-backed securities issuers Finance companies	264.5 10.9	218.4 66.2	249.7 111.1	440.7 134.3	730.2 33.5	798.7 34.8	335.2 34.9	-425.2 -79.4
REITs 2	3.8	27.0	32.3	94.6	55.4	15.5	10.2	-48.6
Brokers and dealers Funding corporations	1.4 -103.6	-1.7 -10.7	6.4 -3.2	15.2 -2.9	.1 104.7	6.4 28.3	-4.0 111.6	77.7 466.4
ALL SECTORS, BY INSTRUMENT								
Total	2,015.5	2,377.8	2,787.4	3,126.8	3,560.7	4,022.0	4,498.8	2,629.4
Open market paper	-191.6 -5.1	-99.1 257.1	-82.0 398.4	106.2 362.5	245.1 307.3	317.1 183.7	-169.4 237.5	-189.0 1,239.0
Treasury securities Agency- and GSE-backed securities 1	642.1	547.2	5/9.1	122.3	82.8	330.6	908.3	769.2
Municipal securities	122.8 635.2	159.4 553.7	137.6 668.0	130.5 830.9	195.0 865.0	177.4 1,241.6	215.6 1,223.2	65.4 -148.6
Bank loans n.e.c. Other loans and advances	-73.9 27.8	-79.8 34.1	-57.4 39.3	75.1 130.5	167.8 159.8	126.8 156.2	335.1 541.0	693.8 72.4
Mortgages	707.6	900.1	998.8	1,251.8	1,437.7	1,393.3	1,070.7	87.0
Consumer credit	150.6	105.2	105.5	117.0	100.3	95.3	136.9	40.2

<sup>&</sup>lt;sup>1</sup> Government-sponsored enterprises (GSE). <sup>2</sup> Real estate investment trusts (REITs).

See next page for continuation of table.

TABLE B-74. Credit market borrowing, 2001-2009—Continued

lter		20	08			2009	
ltem	ı	II	III	IV	ı	II	III
NONFINANCIAL SECTORS							
Domestic	1.748.3	1.056.8	2.665.5	2.011.2	1.430.0	1.514.1	965.0
By instrument	1.748.3	1.056.8	2.665.5	2.011.2	1.430.0	1.514.1	965.0
Commercial paper	42.9	-77.3	62.8	2.2	-151.9	-145.9	-11.0
	411.4	310.1	2,080.2	2,154.2	1,442.8	1,896.4	1,481.2
Treasury securities	1.3	.3	-1.7	1.0	-3.2	-1.1	3.7
Municipal securities	95.5 181.0	61.2 354.9	98.2 92.4	6.9 190.1	120.5	117.3	158.0
Corporate bonds	256.2	85.6	368.0	60.6	579.2 -353.1	395.9 -297.3	262. -282.
Other loans and advances	114.4	95.1	83.0	-130.0	-50.9	-48.5	-20.
Mortgages	530.6	121.5	-134.2	-197.3	-64.8	-282.0	-545.
Home	272.9	-113.3	-328.4	-293.8	-61.6	-225.5	-452.
Multifamily residential	70.4 169.4	69.8 147.2	59.6 116.5	35.3 43.1	2.0 -7.4	1.6 -60.3	-5. -89.
Farm	17.9	17.9	18.1	18.1	2.1	2.2	-us. 2.
Consumer credit	115.0	105.4	16.6	-76.4	-88.7	-120.8	-81.
By sector	1.748.3	1.056.8	2.665.5	2.011.2	1.430.0	1.514.1	965.
Household sector	431.4	31.8	-62.1	-253.3	-160.7	-214.2	-351.
Nonfinancial business	825.6	689.9	575.7	112.8	52.9	-248.9	-283.
Corporate	467.8   380.6	461.2 195.8	405.6 190.4	56.3 42.0	240.6 -195.1	56.8 -299.9	94. –368.
Nonfarm noncorporate Farm	-22.7	32.8	-20.3	14.5	7.5	-299.9 -5.8	-300. -9.
State and local governments	78.6	24.8	73.3	-3.5	98.2	82.0	115.
Federal Government	412.7	310.4	2,078.5	2,155.2	1,439.6	1,895.3	1,484.
Foreign borrowing in the United States	325.3	103.8	-517.5	-429.8	179.7	192.0	291.
Commercial paper	212.0	41.7	-276.4	-261.5	63.1	-23.5	200.
Bonds	79.9 35.4	73.2 -9.0	-261.8 21.5	-139.7	137.5 -19.4	220.7	99.
Bank loans n.e.c	-2.0	-9.0 -2.1	Z1.5 8	-27.4 -1.3	-19.4 -1.5	-6.0 .7	-8.
Nonfinancial domestic and foreign borrowing	2,073.6	1,160.7	2,148.0	1,581.4	1,609.6	1,706.1	1,257.
	2,073.0	1,100.7	2,140.0	1,301.4	1,003.0	1,700.1	1,237.
FINANCIAL SECTORS		047.0	4 407 0	554.0	4 704 0		4 500
By instrument	884.5 -231.5	947.9 -232.6	1,167.3 -380.6	554.3 342.3	-1,781.3 -573.7	-2,134.4 -565.8	-1,532. -430.
GSE issues <sup>1</sup>	111.7	655.8	202.4	117.0	-254.5	-505.6 -680.9	-430. -590.
Agency- and GSE-backed mortgage pool securities 1	533.8	666.4	503.4	285.5	304.4	555.9	481.
Corporate bonds	83.6	-109.7	-540.4	-597.7	-431.0	-448.0	-227.
Bank loans n.e.c. Other loans and advances	180.8 185.7	10.2 -39.6	986.6 390.0	806.7 -402.9	-484.1 -348.0	-627.9 -377.2	–511. –251.
Mortgages	20.4	-2.6	5.9	3.4	-346.0 5.6	9.5	-231. -2.
By sector	884.5	947.9	1,167.3	554.3	-1,781.3	-2.134.4	-1.532.
Commercial banking	228.8	299.2	259.2	-142.7	-298.7	-42.4	-152.
U.Schartered commercial banks	92.0	9.2	512.3	-297.3	-307.7	-59.4	-231.
Foreign banking offices in the United States	-0.6	1	.0	.0	.0	.0	70
Bank holding companies	137.4 101.3	290.1 -76.2	-253.1 -203.7	154.7 -89.9	9.1 -82.9	17.0 -336.2	78. –95.
Credit unions	-15.2	27.6	32.4	-11.6	-41.2	-7.2	
Life insurance companies	9.6	9.2	38.0	48.0	-9.6	-8.0	-12.
Government-sponsored enterprises	111.7	655.8	202.4	117.0	-254.5	-680.9	-590.
Agency- and GSE-backed mortgage pools 1 Asset-backed securities issuers	533.8 -255.1	666.4 -454.2	503.4 -384.7	285.5 -606.6	304.4 -617.4	555.9 -556.9	481. 573.
Finance companies	129.7	-434.2	-169.9	-278.0	-168.3	-168.9	-142.
REITs 2	-69.8	-24.9	-30.5	-69.2	-34.3	-46.2	-20.
Brokers and dealers	221.2	-136.7	762.9	-536.4	-159.9	5	7.
Funding corporations	-111.4	-19.0	157.8	1,838.3	-419.1	-843.0	-433.
ALL SECTORS, BY INSTRUMENT		0.400.7	0.045 -	0.405 =	474-	405.5	
Total	2,958.1 23.4	2,108.6 -268.2	3,315.3 -594.2	2,135.7 83.0	-171.7 -662.5	-428.3 -735.2	–275. –241.
Open market paper	411.4	310.1	2.080.2	2.154.2	1.442.8	1.896.4	-241. 1.481.
Treasury securities Agency- and GSE-backed securities <sup>1</sup> Municipal securities	646.7	1,322.5	704.1	403.5	46.7	-126.1	-105.
Municipal securities	95.5	61.2	98.2	6.9	120.5	117.3	158.
Corporate and foreign bonds	344.5	318.3	-709.7	-547.3	285.7	168.6	133.
Bank loans n.e.c	472.4 298.1	86.8 53.5	1,376.1 472.2	839.9 -534.2	-856.6 -400.5	-931.1 -424.9	-801. -271.
Other loans and advances	551.1	118.9	-128.3	-534.2 -193.9	-400.5 -59.2	-424.9 -272.5	-271. -547.
	115.0	105.4	16.6	-76.4	-88.7	-120.8	-81.

Source: Board of Governors of the Federal Reserve System.

TABLE B-75. Mortgage debt outstanding by type of property and of financing, 1950-2009 [Billions of dollars]

_					Newform		or dollars		Newform		h		
					Nonfarm	oroperties				•	by type of n		
Enc	d of year or	All	Farm			Multi	Com	G		underwritte		Conven	tional <sup>2</sup>
	quarter	proper- ties	proper- ties	Total	1- to 4- family	Multi- family	Com- mercial		1- to	4-family ho	uses		1- to 4-
					houses	proper- ties	proper- ties	Total <sup>1</sup>	Total	FHA- insured	VA- guar- anteed	Total	family houses
1951 . 1952 . 1953 . 1954 . 1955 . 1956 . 1958 . 1959 .		72.7 82.1 91.3 101.1 113.6 129.9 144.5 156.5 171.8 191.6	6.0 6.6 7.2 7.7 8.2 9.0 9.8 10.4 11.1	66.6 75.6 84.1 93.4 105.4 120.9 134.6 146.1 160.7 179.5	45.1 51.6 58.4 65.9 75.7 88.2 99.0 107.6 117.7 131.6	10.1 11.5 12.3 12.9 13.5 14.3 14.9 15.3 16.8 18.7	11.5 12.5 13.4 14.5 16.3 18.3 20.7 23.2 26.1 29.2	22.1 26.6 29.3 32.1 36.2 42.9 47.8 51.6 55.2 59.3	18.8 22.9 25.4 28.1 32.1 38.9 43.9 47.2 50.1 53.8	8.5 9.7 10.8 12.0 12.8 14.3 15.5 16.5 19.7 23.8	10.3 13.2 14.6 16.1 19.3 24.6 28.4 30.7 30.4 30.0	44.6 49.0 54.8 61.3 69.3 78.0 86.8 94.6 105.5 120.2	26.2 28.8 33.1 37.9 43.6 49.3 55.1 60.4 67.6 77.7
1961 . 1962 . 1963 . 1964 . 1965 . 1966 . 1967 .		208.3 229.1 252.7 280.0 307.4 334.7 357.9 382.5 412.1 442.5	12.8 13.9 15.2 16.8 18.9 21.2 23.1 25.0 27.3 29.2	195.4 215.1 237.5 263.1 288.4 313.5 334.8 357.4 384.8 413.3	142.7 155.8 170.5 187.9 204.8 221.9 234.4 248.7 266.1 283.9	20.3 23.0 25.8 29.0 33.6 37.2 40.3 43.9 47.3 52.3	32.4 36.4 41.1 46.2 50.0 54.5 60.1 64.8 71.4 77.1	62.3 65.6 69.4 73.4 77.2 81.2 84.1 88.2 93.4 100.2	56.4 59.1 62.2 65.9 69.2 73.1 76.1 79.9 84.4 90.2	26.7 29.5 32.3 35.0 38.3 42.0 44.8 47.4 50.6 54.5	29.7 29.6 29.9 30.9 31.1 31.3 32.5 33.8 35.7	133.1 149.5 168.1 189.7 211.3 232.4 250.7 269.3 291.4 313.1	86.3 96.7 108.3 122.0 135.6 148.8 158.3 168.8 181.6 193.7
1970 . 1971 . 1972 . 1973 . 1974 . 1976 . 1977 .		474.5 525.0 598.2 673.9 734.0 793.9 881.1 1,013.0 1,165.5 1,331.5	30.5 32.4 35.4 39.8 44.9 55.4 63.8 72.8 86.8	444.0 492.7 562.9 634.1 689.1 744.0 825.7 949.2 1,092.8 1,244.7	298.0 326.4 367.0 408.7 441.5 483.2 546.4 642.5 753.7 870.8	60.1 70.1 82.8 93.2 100.0 100.7 105.9 114.3 125.2	85.8 96.2 113.1 132.3 147.5 160.1 173.4 192.3 213.9 238.8	109.2 120.7 131.1 135.0 140.2 147.0 154.0 161.7 176.4 199.0	97.3 105.2 113.0 116.2 121.3 127.7 133.5 141.6 153.4 172.9	59.9 65.7 68.2 66.2 65.1 66.5 68.0 71.4 81.0	37.3 39.5 44.7 50.0 56.2 61.6 67.0 73.6 82.0 92.0	334.7 371.9 431.7 499.1 548.8 597.0 671.6 787.4 916.4 1,045.7	200.8 221.2 254.1 292.4 320.2 355.5 412.9 500.9 600.3 697.9
1980 . 1981 . 1982 . 1983 . 1984 . 1985 . 1986 . 1987 .		1,467.6 1,591.5 1,676.1 1,871.7 2,120.6 2,370.3 2,657.9 2,996.2 3,313.1 3,585.4	97.5 107.2 111.3 113.7 112.4 94.1 84.0 75.8 70.8 68.8	1,370.1 1,484.3 1,564.8 1,757.9 2,008.2 2,276.2 2,276.2 2,573.9 2,920.4 3,242.3 3,516.6	969.7 1,046.5 1,091.1 1,214.9 1,358.9 1,528.8 1,732.8 1,960.9 2,194.7 2,428.1	141.1 139.2 141.1 154.3 177.4 205.9 239.3 262.1 279.0 289.9	259.3 298.6 332.6 388.6 471.9 541.5 601.7 697.4 768.6 798.6	225.1 238.9 248.9 279.8 294.8 328.3 370.5 431.4 459.7 486.8	195.2 207.6 217.9 248.8 265.9 288.8 328.6 387.9 414.2 440.1	93.6 101.3 108.0 127.4 136.7 153.0 185.5 235.5 258.8 282.8	101.6 106.2 109.9 121.4 129.1 135.8 143.1 152.4 155.4	1,145.1 1,245.4 1,315.9 1,478.1 1,713.4 1,947.8 2,203.4 2,489.0 2,782.6 3,029.8	774.5 838.9 873.3 966.1 1,093.0 1,240.0 1,404.2 1,573.0 1,780.5 1,988.0
1990 . 1991 . 1992 . 1993 . 1994 . 1995 . 1996 . 1997 .		3,788.2 3,929.8 4,043.4 4,174.8 4,339.2 4,524.9 4,792.5 5,104.5 5,589.6 6,195.4	67.6 67.5 67.9 68.4 69.9 71.7 74.4 78.5 83.1 87.2	3,720.6 3,862.4 3,975.5 4,106.4 4,269.3 4,453.2 4,718.1 5,026.0 5,506.5 6,108.2	2,613.6 2,771.9 2,942.0 3,100.9 3,278.2 3,445.4 3,668.4 3,902.5 4,259.0 4,683.0	288.3 284.9 272.0 269.1 269.5 275.4 287.6 299.4 333.5 374.3	818.8 805.6 761.5 736.4 721.6 732.4 762.1 824.1 914.0 1,051.0	517.9 537.2 533.3 513.4 559.3 584.3 620.3 656.7 674.1 731.5	470.9 493.3 489.8 469.5 514.2 537.1 571.2 605.7 623.8 678.8	310.9 330.6 326.0 303.2 336.8 352.3 379.2 405.7 417.9 462.3	160.0 162.7 163.8 166.2 177.3 184.7 192.0 200.0 205.9 216.5	3,202.7 3,325.2 3,442.2 3,592.9 3,710.0 3,869.0 4,097.8 4,369.4 4,832.4 5,376.8	2,142.7 2,278.6 2,452.2 2,631.4 2,764.0 2,908.3 3,097.3 3,296.8 3,635.2 4,004.2
2001 . 2002 . 2003 . 2004 . 2005 . 2006 . 2007 . 2008 .		6,754.2 7,461.8 8,361.9 9,365.5 10,627.4 12,065.1 13,458.4 14,529.0 14,616.0	84.7 88.5 95.4 83.2 95.7 104.8 108.0 112.7 130.7	6,669.4 7,373.2 8,266.5 9,282.3 10,531.8 11,960.3 13,350.3 14,416.4 14,485.3	5,107.8 5,659.7 6,414.4 7,223.6 8,248.4 9,357.0 10,416.8 11,112.5 11,005.3	403.5 445.5 484.5 564.3 617.5 688.2 743.6 844.3 909.9	1,158.2 1,268.0 1,367.6 1,494.4 1,665.9 1,915.1 2,189.9 2,459.6 2,570.2	773.1 772.7 759.3 709.2 661.5 606.6 600.2 609.2 807.2	720.0 718.5 704.0 653.3 605.4 550.4 543.5 552.6 750.7	499.9 497.4 486.2 438.7 398.1 348.4 336.9 342.6 534.0	220.1 221.2 217.7 214.6 207.3 202.0 206.6 210.0 216.7	5,896.3 6,600.6 7,507.2 8,573.1 9,870.3 11,353.7 12,750.2 13,807.2 13,678.1	4,387.8 4,941.2 5,710.4 6,570.3 7,643.0 8,806.6 9,873.3 10,559.9 10,254.6
	        V	14,661.5 14,699.8 14,684.8 14,616.0	117.2 121.6 126.1 130.7	14,544.4 14,578.2 14,558.7 14,485.3	11,180.3 11,160.3 11,107.8 11,005.3	863.1 880.5 900.4 909.9	2,501.0 2,537.4 2,550.4 2,570.2	640.7 683.9 742.7 807.2	583.8 627.2 686.1 750.7	372.3 412.2 474.4 534.0	211.5 215.0 211.7 216.7 228.9	13,903.7 13,894.3 13,815.9 13,678.1	10,596.5 10,533.0 10,421.6 10,254.6
2009:	    <i>P</i>	14,598.1 14,537.4 14,418.7	131.2 131.7 132.3	14,466.9 14,405.7 14,286.5	10,990.8 10,942.7 10,850.0	912.6 912.9 911.6	2,563.6 2,550.0 2,524.8	863.6 921.5 940.8	806.7 863.1 881.0	577.8 628.0 697.3	228.9 235.2 183.7	13,603.4 13,484.2 13,345.7	10,184.1 10,079.6 9,969.1

<sup>&</sup>lt;sup>1</sup> Includes Federal Housing Administration (FHA)-insured multi-family properties, not shown separately.
<sup>2</sup> Derived figures. Total includes multi-family and commercial properties with conventional mortgages, not shown separately.

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

TABLE B-76. Mortgage debt outstanding by holder, 1950-2009

[Billions of dollars]

			ξ5.	Major financia	al institutions		Other h	olders
End of year or quar	ter T	otal	Total	Savings institutions <sup>1</sup>	Commercial banks <sup>2</sup>	Life insurance companies	Federal and related agencies <sup>3</sup>	Individuals and others <sup>4</sup>
1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960		72.7 82.1 91.3 101.1 113.6 129.9 144.5 156.5 171.8 191.6 208.3 229.1 252.7	51.7 59.5 66.9 75.0 85.7 99.3 111.2 119.7 131.5 145.5 172.6 192.5	21.9 25.5 29.8 34.8 41.1 48.9 55.5 61.2 68.9 78.1 86.9 98.0	13.7 14.7 15.9 16.9 18.6 21.0 22.7 23.3 25.5 28.1 28.8 30.4 34.5	16.1 19.3 21.3 23.3 26.0 29.4 33.0 35.2 37.1 39.2 41.8 44.2	2.6 3.3 3.9 4.4 4.7 5.3 6.2 7.7 8.0 10.2 11.5 12.2 12.6	18.4 19.3 20.4 21.7 23.2 25.3 27.1 29.1 32.3 35.9 39.3 44.2 47.6
1963		280.0 307.4 334.7 357.9 382.5 412.1 442.5	217.1 241.0 264.6 280.7 298.7 319.7 338.9	127.2 141.9 154.9 161.8 172.3 184.3 196.4	39.4 44.0 49.7 54.4 58.9 65.5 70.5	50.5 55.2 60.0 64.6 67.5 70.0 72.0	11.8 12.2 13.5 17.5 20.9 25.1 31.1	51.0 54.1 56.6 59.7 62.8 67.3 72.4
1970 1971 1972 1973 1974 1975 1976 1977 1977 1978		474.5 525.0 598.2 673.9 734.0 793.9 881.1 1,013.0 1,165.5 1,331.5	355.9 394.2 449.9 505.4 542.6 581.2 647.5 745.2 848.2 938.2	208.3 236.2 273.6 305.0 324.2 355.8 404.6 469.4 528.0 574.6	73.3 82.5 99.3 119.1 132.1 136.2 151.3 179.0 214.0 245.2	74.4 75.5 76.9 81.4 86.2 89.2 91.6 96.6 106.2 118.4	38.3 46.3 54.5 64.7 82.2 101.1 116.7 140.5 170.6 216.0	80.2 84.5 93.8 103.9 109.2 111.5 116.9 127.3 146.8
1980 1981 1982 1983 1984 1985 1986 1987 1988		1,467.6 1,591.5 1,676.1 1,871.7 2,120.6 2,370.3 2,657.9 2,996.2 3,313.1 3,585.4	996.8 1,040.5 1,021.3 1,108.1 1,247.8 1,363.5 1,476.5 1,667.6 1,834.3 1,935.2	603.1 618.5 578.1 626.6 709.7 760.5 778.0 860.5 924.5 910.3	262.7 284.2 301.3 330.5 381.4 431.2 504.7 594.8 676.9 770.7	131.1 137.7 142.0 151.0 156.7 171.8 193.8 212.4 232.9 254.2	256.8 289.4 355.4 433.3 490.6 580.9 733.7 857.9 937.8 1,067.3	214.0 261.6 299.4 330.2 382.3 425.8 447.7 541.1 582.9
1990 1991 1992 1993 1994 1995 1996 1997 1998		3,788.2 3,929.8 4,043.4 4,174.8 4,339.2 4,524.9 4,792.5 5,104.5 5,589.6 6,195.4	1,918.8 1,846.2 1,770.4 1,770.1 1,824.7 1,900.1 1,981.9 2,084.0 2,194.6 2,394.3	801.6 705.4 627.9 598.4 596.2 596.8 628.3 631.8 644.0 668.1	849.3 881.3 900.5 947.8 1,012.7 1,090.2 1,145.4 1,245.3 1,337.0 1,495.4	267.9 259.5 242.0 223.9 215.8 213.1 208.2 206.8 213.6 230.8	1,258.9 1,422.5 1,558.1 1,682.8 1,788.0 1,878.7 2,006.1 2,111.4 2,310.9 2,613.3	610.5 661.2 714.9 721.8 726.6 746.2 804.6 909.1 1,084.2 1,187.9
2000		6,754.2 7,461.8 8,361.9 9,365.5 10,627.4 12,065.1 13,458.4 14,529.0 14,616.0	2,619.0 2,790.9 3,089.3 3,387.3 3,926.3 4,780.8 5,065.8 5,044.0	723.0 758.0 781.0 870.6 1,057.4 1,152.7 1,074.0 1,095.3 860.2	1,660.1 1,789.8 2,058.3 2,255.8 2,595.6 2,958.0 3,403.1 3,644.4 3,841.4	235.9 243.0 250.0 260.9 273.3 285.5 303.8 326.2 342.4	2,834.4 3,205.0 3,592.2 4,026.8 4,079.1 4,208.5 4,525.9 5,190.2 5,759.3	1,300.8 1,465.9 1,680.4 1,951.4 2,622.0 3,460.4 4,151.6 4,273.0 3,812.7
2008:		14,661.5 14,699.8 14,684.8 14,616.0 14,598.1 14,537.4 14,418.7	5,127.2 5,112.7 5,077.9 5,044.0 5,041.7 4,988.1 4,857.2	1,111.8 1,115.6 883.6 860.2 849.8 755.5 728.7	3,684.5 3,660.7 3,853.4 3,841.4 3,853.3 3,897.6 3,795.5	330.9 336.4 340.9 342.4 338.6 335.0 332.9	5,344.5 5,518.2 5,651.1 5,759.3 5,858.8 5,981.5 6,112.2	4,189.8 4,068.9 3,955.9 3,812.7 3,697.6 3,567.8 3,449.4

Source: Board of Governors of the Federal Reserve System, based on data from various Government and private organizations.

Includes savings banks and savings and loan associations. Data reported by Federal Savings and Loan Insurance Corporation—insured institutions include loans in process for 1987 and exclude loans in process beginning with 1988.

2 Includes loans held by nondeposit trust companies but not loans held by bank trust departments.

3 Includes Government National Mortgage Association (ISMMA or Ginnie Mae), Federal Housing Administration, Veterans Administration, Farmers Home Administration (FmHA), Federal Deposit Insurance Corporation, Resolution Trust Corporation, Homerowners Loan Corporation, Federal Farm Mortgage Corporation, and Public Housing Administration. Also includes U.S. sponsored agencies such as Federal National Mortgage Association (FMMA or Fannie Mae), Federal Land Banks, Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), Federal Agricultural Mortgage Corporation (Farmer Mac, beginning 1994), Federal Home Loan Banks (beginning 1997), and mortgage pass-through securities issued or guaranteed by GNMA, FHLMC, FNMA, FmHA, or Farmer Mac. Other U.S. agencies (amounts small or current separate data not readily available) included with "individuals and others."

4 Includes private mortgage pools.

Source: Board of Governors of the Federal Beserve System based on data from various Government and private organizations.

## TABLE B-77. Consumer credit outstanding, 1959-2009

[Amount outstanding (end of month); millions of dollars, seasonally adjusted]

Year and month	Total consumer credit <sup>1</sup>	Revolving	Nonrevolving <sup>2</sup>
December:	EC 010 C0		EC 010 C0
1959 1960	56,010.68 60.025.31		56,010.68 60.025.31
1961	62,248.53		62,248.53
1962	68,126.72		68,126.72
1963 1964	76,581.45 85,959.57		76,581.45 85,959.57
1965	95,954.72		95,954.72
1966 1967	101,788.22 106,842,64		101,788.22 106,842,64
1968	106,842.64 117,399.09	2,041.54	106,842.64 115,357.55 123,551.35
1969	127,156.18	3,604.84	123,551.35
1970 1971	131,551.55 146,930.18 166,189.10	4,961.46 8.245.33	126,590.09 138,684.84 156,809.86
1972	166,189.10	8,245.33 9,379.24	156,809.86
1973 1974	190,086.31 198.917.84	11,342.22 13,241.26	178,744.09 185,676.58
1975	204,002.00	14,495.27	189,506.73
1976 1977	225,721.59 260,562.70	16,489.05 37,414.82	209,232.54 223,147.88
1978	306,100.39	45,690.95	260,409.43
1979	348,589.11	53,596.43	294,992.67
1980 1981	351,920.05 371,301.44 389,848.74	54,970.05 60,928.00	296,950.00 310,373.44
1982	389,848.74	66,348.30	323,500.44
1983 1984	437,068.86 517,278,98	79,027.25 100,385.63	358,041.61 416,893.35
1985	517,278.98 599,711.23	124,465.80 141,068.15	475,245.43
1986 1987	654,750.24 686,318.77	141,068.15 160,853.91	513,682.08 525,464.86
1987 1988 <sup>3</sup>	731,917.76	184,593.12	547,324.64
1989	794,612.18	211,229.83	583,382.34
1990 1991	808,230.57 798,028.97	238,642.62	569,587.95 534,260.42
1992	806,118.69	263,768.55 278,449.67	534,260.42 527,669.02
1993 1994	865,650.58	309,908.02	555,742.56 631,732.19
1995	997,301.74 1,140,744.36	365,569.56 443,920.09	696,824.27
1996 1997	1,253,437.09	507,516.57 540,005.56	745,920.52 784,751.77
1998	1,324,757.33 1,420,996.44	581,414.78	839.581.66
1999	1,531,105.96	610,696.47	920,409.49
2000 2001	1,716,507.37 1,866,189,7/	683,457.38 715,219.04	1,033,049.99 1,150,970.71
2002	1,866,189.74 1,970,765.38	715,219.04 750,909.70 767,737.39 799,175.76	1.219.855.68
2003 2004	2,076,111.26 2,191,505.71	767,737.39	1,308,373.87 1,392,329.96
2005	2,290,975.48	829,785.83	1,461,189.65
2006 2007	2,384,812.00 2,519,499.68	871,313.07 939,625.71	1,513,498.93 1,579,873.97
2008	2,559,121.52	957,341.01	1,601,780.51
2008: Jan	2,527,135.88	945,175.89	1,581,959.99
Feb Mar	2,536,333.46 2,548,117,70	949,645.39 955,308.35	1,586,688.07 1,592,809.34
Apr	2,548,117.70 2,559,257.25	958,195.32 961,352.90 967,194.29	1,601,061.93
May June	2,563,619.01 2,574,328.52	961,352.90	1,602,266.11 1,607,134.23
July	2,581,550.22	9/3,600.6/	1,607,949.55
Aug	2,576,113.04 2,578,348.57	975,056.42 975,160.71	1,601,056.63 1,603,187.86
Sept Oct	2.574.966.66	970.840.41	1,604,126.25
Nov	2,564,503.55 2,560,121,52	963,952.69 957,341.01	1,604,126.25 1,600,550.86 1,601,790.51
Dec	2,559,121.52 2,564,375,71		1,601,780.51
Feb	2,564,375.71 2,551,383.40	955,399.91 942,695.36	1,608,975.80 1,608,688.04
Mar	2,536,960.22 2,522,327,21	934,256.97 925.910.25	1,602,703.25 1,596,416.96
Apr May	2.515.268.82	916,563.24	1,598,705.58
Jun'e	2.506.772.12	911 692 68	1.595.079.45
July Aug	2,498,526.68 2,495,162.27	911,018.08 902,981.36 895,048.05	1,587,508.60 1,592,180.91
Sept	2,486,293.30	895,048.05	1,591,245.25
Oct Nov <sup>p</sup>	2,482,101.94 2,464,608.21	887,661.34 873,995.62	1,594,440.60 1,590,612.59

<sup>&</sup>lt;sup>1</sup> Covers most short- and intermediate-term credit extended to individuals. Credit secured by real estate is excluded.

Source: Board of Governors of the Federal Reserve System.

<sup>&</sup>lt;sup>2</sup> Includes automobile loans and all other loans not included in revolving credit, such as loans for mobile homes, education, boats, trailers, or vacations. These loans may be secured or unsecured. Beginning with 1977, includes student loans extended by the Federal Government and by SLM Holding Corporation.
<sup>3</sup> Data newly available in January 1989 result in breaks in these series between December 1988 and subsequent months.

### GOVERNMENT FINANCE

TABLE B-78. Federal receipts, outlays, surplus or deficit, and debt, fiscal years, 1943-2011 [Billions of dollars; fiscal years]

		Total		ling)	On-budget	1013, 113601	ycaraj	Off-budget		Federa	al debt	
		iviai			on buuget			on bauget		(end of	period)	Adden- dum:
Fiscal year or period	Receipts	Outlays	Surplus or deficit (–)	Receipts	Outlays	Surplus or deficit (–)	Receipts	Outlays	Surplus or deficit (–)	Gross Federal	Held by the public	Gross domestic product
1943 1944 1945 1946 1947 1948	24.0 43.7 45.2 39.3 38.5 41.6 39.4	78.6 91.3 92.7 55.2 34.5 29.8 38.8	-54.6 -47.6 -47.6 -15.9 4.0 11.8	22.9 42.5 43.8 38.1 37.1 39.9 37.7	78.5 91.2 92.6 55.0 34.2 29.4 38.4	-55.6 -48.7 -48.7 -17.0 2.9 10.5 7	1.1 1.3 1.3 1.2 1.5 1.6 1.7	0.1 .1 .1 .2 .3 .4	1.0 1.2 1.2 1.0 1.2 1.2 1.3	142.6 204.1 260.1 271.0 257.1 252.0 252.6	127.8 184.8 235.2 241.9 224.3 216.3 214.3	180.3 209.2 221.4 222.6 233.2 256.6 271.3
1950 1951 1952 1953 1954 1955 1956 1956 1957	39.4 51.6 66.2 69.6 69.7 65.5 74.6 80.0 79.6	42.6 45.5 67.7 76.1 70.9 68.4 70.6 82.4	-3.1 6.1 -1.5 -6.5 -1.2 -3.0 3.9 3.4 -2.8	37.3 48.5 62.6 65.5 65.1 60.4 68.2 73.2 71.6	42.0 44.2 66.0 73.8 67.9 64.5 65.7 70.6 74.9	-4.7 4.3 -3.4 -8.3 -2.8 -4.1 2.5 2.6 -3.3	2.1 3.1 3.6 4.1 4.6 5.1 6.4 6.8	.5 1.3 1.7 2.3 2.9 4.0 5.0 6.0 7.5	1.6 1.8 1.9 1.8 1.7 1.1 1.5 .8	256.9 255.3 259.1 266.0 270.8 274.4 272.7 272.3 279.7	219.0 214.3 214.8 218.4 224.5 226.6 222.2 219.3 226.3	273.1 320.2 348.7 372.5 377.0 395.9 427.0 450.9 460.0
1959 1960 1961 1961 1962 1963 1964 1965 1966 1967 1968	79.2 92.5 94.4 99.7 106.6 112.6 116.8 130.8 148.8	92.1 92.2 97.7 106.8 111.3 118.5 118.2 134.5 157.5	-12.8 -3.3 -7.1 -4.8 -5.9 -1.4 -3.7 -8.6	71.0 81.9 82.3 87.4 92.4 96.2 100.1 111.7 124.4	83.1 81.3 86.0 93.3 96.4 102.8 101.7 114.8 137.0	-12.1 .5 -3.8 -5.9 -4.0 -6.5 -1.6 -3.1 -12.6	8.3 10.6 12.1 12.3 14.2 16.4 16.7 19.1 24.4	9.0 10.9 11.7 13.5 15.0 15.7 16.5 19.7 20.4	7 2 .4 -1.3 8 .6 .2 6 4.0	287.5 290.5 292.6 302.9 310.3 316.1 322.3 328.5 340.4	234.7 236.8 238.4 248.0 254.0 256.8 260.8 263.7 266.6	490.2 518.9 529.9 567.8 599.2 641.5 687.5 755.8 810.0
1970	153.0 186.9 192.8 187.1 207.3 230.8 263.2 279.1 298.1 81.2 355.6	178.1 183.6 195.6 210.2 230.7 245.7 269.4 332.3 371.8 96.0 409.2	-25.2 3.2 -2.8 -23.0 -23.4 -14.9 -6.1 -53.2 -73.7 -14.7 -53.7	128.1 157.9 159.3 151.3 167.4 184.7 209.3 216.6 231.7 63.2 278.7	155.8 158.4 168.0 177.3 193.5 200.0 216.5 270.8 301.1 77.3 328.7	-27.7 5 -8.7 -26.1 -15.2 -7.2 -54.1 -69.4 -14.1 -49.9	24.9 29.0 33.5 35.8 39.9 46.1 53.9 62.5 66.4 18.0 76.8	22.3 25.2 27.6 32.8 37.2 45.7 52.9 61.6 70.7 18.7 80.5	2.6 3.7 5.9 3.0 2.7 .3 1.1 .9 -4.3 7 -3.7	368.7 365.8 380.9 408.2 435.9 466.3 483.9 541.9 629.0 643.6 706.4	289.5 278.1 283.2 303.0 322.4 340.9 343.7 394.7 477.4 495.5 549.1	868.4 948.1 1,012.7 1,080.0 1,176.5 1,310.6 1,438.5 1,560.2 1,738.1 459.4 1,973.5
1978 1979 1980 1981 1982 1983 1983 1984 1985 1986 1986	399.6 463.3 517.1 599.3 617.8 600.6 666.4 734.0 769.2 854.3 909.1	458.7 504.0 590.9 678.2 745.7 808.4 851.8 946.3 990.4 1,004.0	-59.2 -40.7 -73.8 -79.0 -128.0 -207.8 -185.4 -212.3 -221.2 -149.7 -155.2	314.2 365.3 403.9 469.1 474.3 453.2 500.4 547.9 568.9 640.9	369.6 404.9 477.0 543.0 594.9 660.9 685.6 769.4 806.8 809.2 863.0	-55.4 -39.6 -73.1 -73.9 -120.6 -207.7 -185.3 -221.5 -237.9 -168.4 -192.3	85.4 98.0 113.2 130.2 143.5 147.3 166.1 186.2 200.2 213.4 241.5	89.2 99.1 113.9 135.3 150.9 147.4 166.2 176.9 183.5 194.8	-3.8 -1.1 -7 -5.1 -7.4 -1.1 -1.1 9.2 16.7 18.6 37.1	776.6 829.5 909.0 994.8 1,137.3 1,371.7 1,564.6 1,817.4 2,120.5 2,346.0 2,607.1	607.1 640.3 711.9 789.4 924.6 1,137.3 1,307.0 1,507.3 1,740.6 1,889.8 2,010.7	2,217.5 2,501.4 2,724.2 3,057.0 3,223.7 3,440.7 3,844.4 4,146.3 4,403.9 4,651.4 5,008.5
1989 1990 1991 1992 1993 1993 1994 1995 1996 1997 1998	991.1 1,032.0 1,055.0 1,091.2 1,154.3 1,258.6 1,351.8 1,453.1 1,579.2 1,721.7 1,827.5	1,143.7 1,253.0 1,324.2 1,381.5 1,409.4 1,461.8 1,515.8 1,560.5 1,601.1 1,652.5 1,701.8	-152.6 -221.0 -269.2 -290.3 -255.1 -203.2 -164.0 -107.4 -21.9 69.3 125.6	727.4 750.3 761.1 788.8 842.4 923.6 1,000.7 1,085.6 1,187.3 1,305.9	932.8 1,027.9 1,082.5 1,129.2 1,142.8 1,182.4 1,227.1 1,259.6 1,290.5 1,335.9	-205.4 -277.6 -321.4 -340.4 -300.4 -258.8 -226.4 -174.0 -103.2 -29.9 1.9	263.7 281.7 293.9 302.4 311.9 335.0 351.1 367.5 392.0 415.8 444.5	210.9 225.1 241.7 252.3 266.6 279.4 288.7 300.9 310.6 316.6 320.8	52.8 56.6 52.2 50.1 45.3 55.7 62.4 66.6 81.4 99.2 123.7	2,867.8 3,206.3 3,598.2 4,001.8 4,351.0 4,643.3 4,920.6 5,181.5 5,369.2 5,478.2 5,605.5	2,190.7 2,411.6 2,689.0 2,999.7 3,248.4 3,433.1 3,604.4 3,734.1 3,772.3 3,721.1	5,399.5 5,734.5 5,930.5 6,242.0 6,587.3 6,976.6 7,341.1 7,718.3 8,211.7 8,663.0 9,208.4
2000 2001 2002 2002 2003 2004 2005 2006 2007 2008	2,025.2 1,991.1 1,853.1 1,782.3 1,880.1 2,153.6 2,406.9 2,568.0 2,524.0 2,105.0	1,789.0 1,862.9 2,010.9 2,159.9 2,292.9 2,472.0 2,655.1 2,728.7 2,982.6 3,517.7	236.2 128.2 -157.8 -377.6 -412.7 -318.3 -248.2 -160.7 -458.6 -1,412.7	1,544.6 1,483.6 1,337.8 1,258.5 1,345.4 1,576.1 1,798.5 1,932.9 1,866.0 1,451.0	1,458.2 1,516.1 1,655.2 1,796.9 1,913.3 2,069.8 2,233.0 2,275.1 2,507.8 3,000.7	86.4 -32.4 -317.4 -538.4 -568.0 -493.6 -434.5 -342.2 -641.9 -1,549.7	480.6 507.5 515.3 523.8 534.7 577.5 608.4 635.1 658.0 654.0	330.8 346.8 355.7 363.0 379.5 402.2 422.1 453.6 474.8 517.0	149.8 160.7 159.7 160.8 155.2 175.3 186.3 181.5 183.3 137.0	5,628.7 5,769.9 6,198.4 6,760.0 7,354.7 7,905.3 8,451.4 8,950.7 9,986.1 11,875.9	3,409.8 3,319.6 3,540.4 3,913.4 4,295.5 4,592.2 4,829.0 5,035.1 5,803.1 7,544.7	9,821.0 10,225.3 10,543.9 10,979.8 11,685.6 12,445.7 13,224.9 13,896.0 14,439.0 14,237.2
2010 (estimates) 2011 (estimates)	2,165.1 2,567.2	3,720.7 3,833.9	-1,555.6 -1,266.7	1,529.9 1,893.1	3,163.7 3,255.7	-1,633.8 -1,362.6	635.2 674.1	557.0 578.2	78.2 95.9	13,786.6 15,144.0	9,297.7 10,498.3	14,623.9 15,299.0

Note: Fiscal years through 1976 were on a July 1—June 30 basis; beginning with October 1976 (fiscal year 1977), the fiscal year is on an October 1—September 30 basis. The transition quarter is the three-month period from July 1, 1976 through September 30, 1976.

See Budget of the United States Government, Fiscal Year 2011, for additional information.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, and Office of Management and Budget.

Table B–79. Federal receipts, outlays, surplus or deficit, and debt, as percent of gross domestic product, fiscal years 1937-2011

[Percent; fiscal years]

		Out	ays	Surplus	Federal debt (	end of period)
Fiscal year or period	Receipts	Total	National defense	or deficit (–)	Gross Federal	Held by public
1937	6.1 7.6	8.6		-2.5		
1938 1939	7.6 7.1	7.7 10.3		1 -3.2	54.0	46.5
1940	6.8	9.8	1.7	-3.0 -4.3	52.4 50.4	44.2
1941 1942	7.6 10.1	12.0 24.3	5.6 17.8	-14.2	54.9	42.3 47.0
1943 1944	13.3 20.9	43.6 43.6	37.0 37.8	-30.3 -22.7	79.1 97.6	70.9 88.3
1945	20.4 17.7	41.9 24.8	37.5 19.2	-21.5 -7.2	117.5	88.3 106.2
1946 1947	16.5	14.8	5.5	1.7	121.7 110.3	108.7 96.2
1948 1949	16.2 14.5	11.6 14.3	3.5 4.8	4.6 .2	98.2 93.1	84.3 79.0
1950	14.4	15.6	5.0	-1.1	94.1	80.2
1951 1952	16.1 19.0	14.2 19.4	7.4 13.2	1.9 4	79.7 74.3	66.9 61.6
1953 1954	18.7 18.5	20.4 18.8	14.2 13.1	-1.7 3	71.4 71.8	58.6 59.5
1955	16.5	17.3	10.8	8	69.3	57.2
1956 1957	17.5 17.7	16.5 17.0	10.0 10.1	.9 .8	63.9 60.4	52.0 48.6
1958 1959	17.3 16.2	17.9 18.8	10.2 10.0	6 -2.6	60.8 58.6	49.2 47.9
1960	17.8	17.8	9.3	.1	56.0	45.6
1961 1962	17.8 17.6	18.4 18.8	9.4 9.2	6 -1.3	55.2 53.4	45.0 43.7
1963	17.8 17.6	18.6	8.9 8.5	8 9	51.8 49.3	42.4 40.0
1964 1965	17.0	18.5 17.2	7.4	2	46.9	37.9
1966 1967	17.3 18.4	17.8 19.4	7.7 8.8	5 -1.1	43.5 42.0	34.9 32.9
1968 1969	17.6 19.7	20.5 19.4	9.4 8.7	-2.9 .3	42.5 38.6	33.3 29.3
1970	19.0	19.3	8.1	3	37.6	28.0
1971 1972	17.3 17.6	19.5 19.6	7.3 6.7	-2.1 -2.0	37.8 37.1	28.1 27.4
1973	17.6	18.7	5.9	-1.1	35.6	26.0
1974 1975	18.3 17.9	18.7 21.3	5.5 5.5	4 -3.4	33.6 34.7	23.9 25.3
1976 Transition quarter	17.1 17.7	21.4 20.9	5.2 4.8	-4.2	36.2 35.0	27.5 27.0
1977	18.0	20.7	4.9	-3.2 -2.7 -2.7	35.8	27.8 27.4
1978 1979	18.0 18.5	20.7 20.1	4.7 4.7	-2.7 -1.6	35.0 33.2	27.4 25.6
1980	19.0	21.7	4.9	-2.7	33.4	26.1
1981 1982	19.6 19.2	22.2 23.1	5.2 5.7	-2.6 -4.0	32.5 35.3	26.1 25.8 28.7
1983 1984	17.5 17.3	23.5 22.2	6.1 5.9	-6.0 -4.8	39.9 40.7	33.1 34.0
1985	17.7	22.8	6.1	-5.1	43.8	36.4
1986 1987	17.5 18.4	22.5 21.6	6.2 6.1	-5.0 -3.2	48.2 50.4	39.5 40.6
1988 1989	18.2 18.4	21.3 21.2	5.8 5.6	-3.1 -2.8	51.9 53.1	41.0 40.6
1990	18.0	21.9	5.2	-3.9	55.9	42.1
1991 1992	17.8 17.5	22.3 22.1	4.6 4.8	-4.5 -4.7	60.7 64.1	45.3 48.1
1993 1994	17.5 18.0	21.4 21.0	4.4 4.0	-3.9 -2.9	66.1 66.6	49.3 49.2
1995	18.4	20.6	3.7	-2.2	67.0	49.1
1996 1997	18.8 19.2	20.2 19.5	3.4 3.3	-1.4 3	67.1 65.4	48.4 45.9
1998 1999	19.9 19.8	19.1 18.5	3.1 3.0	.8 1.4	63.2 60.9	43.0 39.4
2000	20.6	18.2	3.0	2.4	57.3	
2001 2002	19.5 17.6	18.2 19.1	3.0 3.3	1.3 -1.5	56.4 58.8	34.7 32.5 33.6
2003	16.2	19.7	3.7	-3.4	61.6	35.6
2004 2005	16.1 17.3	19.6 19.9	3.9 4.0	-3.5 -2.6	62.9 63.5	36.8 36.9
2006	18.2 18.5	20.1 19.6	3.9 4.0	-1.9 -1.2	63.9 64.4	36.5 36.2
2008	17.5	20.7	4.3	-3.2	69.2	40.2
2009 2010 (estimates)	14.8 14.8	24.7 25.4	4.6 4.9	−9.9 −10.6	83.4 94.3	53.0 63.6
2011 (estimates)	16.8	25.1	4.9	-8.3	99.0	68.6

Note: See Note, Table B-78.

Sources: Department of the Treasury and Office of Management and Budget.

Table B–80. Federal receipts and outlays, by major category, and surplus or deficit, fiscal years  $1943{-}2011\,$ 

[Billions of dollars; fiscal years]

Reco	eipts (on-l	budget a	nd off-bud	get)			0	utlays (o	n-budge	t and off-	-budget)				Surplus
Total	Indi- vidual income taxes	Corpo- ration income taxes	Social insur- ance and retire- ment receipts	Other	Total	Na dei Total	Depart- ment of Defense, military	Inter- na- tional affairs	Health	Medi- care	In- come secu- rity	Social secu- rity	Net inter- est	Other	or deficit () (on- budget and off- budget)
24.0 43.7 45.2 39.3 38.5 41.6 39.4	6.5 19.7 18.4 16.1 17.9 19.3 15.6	9.6 14.8 16.0 11.9 8.6 9.7	3.0 3.5 3.5 3.1 3.4 3.8 3.8	4.9 5.7 7.3 8.2 8.5 8.8 8.9	78.6 91.3 92.7 55.2 34.5 29.8 38.8	66.7 79.1 83.0 42.7 12.8 9.1 13.2		1.3 1.4 1.9 1.9 5.8 4.6 6.1	0.1 .2 .2 .2 .2 .2 .2		1.7 1.5 1.1 2.4 2.8 2.5 3.2	0.2 .2 .3 .4 .5 .6	1.5 2.2 3.1 4.1 4.2 4.3 4.5	7.0 6.6 3.1 3.6 8.2 8.5 11.1	-54.6 -47.6 -47.6 -15.9 4.0 11.8
51.6 66.2 69.6 69.7 65.5 74.6 80.0 79.6 79.2	15.8 21.6 27.9 29.8 29.5 28.7 32.2 35.6 34.7 36.7	10.4 14.1 21.2 21.2 21.1 17.9 20.9 21.2 20.1 17.3	4.3 5.7 6.4 6.8 7.2 7.9 9.3 10.0 11.2 11.7	8.9 10.2 10.6 11.7 11.9 11.0 12.2 13.2 13.6 13.5	67.7 76.1 70.9 68.4 70.6 76.6 82.4 92.1	13.7 23.6 46.1 52.8 49.3 42.7 42.5 45.4 46.8 49.0		4.7 3.6 2.7 2.1 1.6 2.2 2.4 3.1 3.4 3.1	.3 .3 .3 .3 .3 .4 .5 .5 .7		4.1 3.4 3.7 3.8 4.4 5.1 4.7 5.4 7.5 8.2	.8 1.6 2.1 2.7 3.4 4.4 5.5 6.7 8.2 9.7	4.8 4.7 5.2 4.8 4.9 5.1 5.4 5.6 5.8	14.2 8.4 8.1 9.1 7.1 8.9 10.1 10.3 15.5	-3.1 6.1 -1.5 -6.5 -1.2 -3.0 3.9 3.4 -2.8 -12.8
92.5 94.4 99.7 106.6 112.6 116.8 130.8 148.8 153.0 186.9	40.7 41.3 45.6 47.6 48.7 48.8 55.4 61.5 68.7 87.2	21.5 21.0 20.5 21.6 23.5 25.5 30.1 34.0 28.7 36.7	14.7 16.4 17.0 19.8 22.0 22.2 25.5 32.6 33.9 39.0	15.6 15.7 16.5 17.6 18.5 20.3 19.8 20.7 21.7 23.9	92.2 97.7 106.8 111.3 118.5 118.2 134.5 157.5 178.1 183.6	48.1 49.6 52.3 53.4 54.8 50.6 58.1 71.4 81.9 82.5	50.1 51.1 52.6 48.8 56.6 70.1 80.4 80.8	3.0 3.2 5.6 5.3 4.9 5.6 5.6 5.6 4.6	.8 .9 1.2 1.5 1.8 1.8 2.5 3.4 4.4 5.2	0.1 2.7 4.6 5.7	7.4 9.7 9.2 9.3 9.7 9.5 9.7 10.3 11.8 13.1	11.6 12.5 14.4 15.8 16.6 17.5 20.7 21.7 23.9 27.3	6.9 6.7 6.9 7.7 8.2 8.6 9.4 10.3 11.1 12.7	14.4 15.2 17.2 18.3 22.6 25.0 28.5 32.1 35.1 32.6	.3 -3.3 -7.1 -4.8 -5.9 -1.4 -3.7 -8.6 -25.2 3.2
192.8 187.1 207.3 230.8 263.2 279.1 298.1 81.2 355.6 399.6	90.4 86.2 94.7 103.2 119.0 122.4 131.6 38.8 157.6 181.0 217.8	32.8 26.8 32.2 36.2 38.6 40.6 41.4 8.5 54.9 60.0 65.7	44.4 47.3 52.6 63.1 75.1 84.5 90.8 25.2 106.5 121.0	25.2 26.8 27.8 28.3 30.6 31.5 34.3 8.8 36.6 37.7	195.6 210.2 230.7 245.7 269.4 332.3 371.8 96.0 409.2 458.7 504.0	81.7 78.9 79.2 76.7 79.3 86.5 89.6 22.3 97.2 104.5	80.1 77.5 77.6 75.0 77.9 84.9 87.9 21.8 95.1 102.3	4.3 4.2 4.8 4.1 5.7 7.1 6.4 2.5 6.4 7.5	5.9 6.8 8.7 9.4 10.7 12.9 15.7 3.9 17.3 18.5 20.5	6.2 6.6 7.5 8.1 9.6 12.9 15.8 4.3 19.3 22.8	15.7 22.9 27.7 28.3 33.7 50.2 60.8 15.0 61.1 61.5	30.3 35.9 40.2 49.1 55.9 64.7 73.9 19.8 85.1 93.9	14.4 14.8 15.5 17.3 21.4 23.2 26.7 6.9 29.9 35.5	37.2 40.0 47.3 52.8 52.9 74.8 82.7 21.4 93.0 114.7	-2.8 -23.0 -23.4 -14.9 -6.1 -53.2 -73.7 -14.7 -53.7 -59.2 -40.7
517.1 599.3 617.8 600.6 666.4 734.0 769.2 854.3 909.2 991.1	244.1 285.9 297.7 288.9 298.4 334.5 349.0 392.6 401.2 445.7	64.6 61.1 49.2 37.0 56.9 61.3 63.1 83.9 94.5 103.3	157.8 182.7 201.5 209.0 239.4 265.2 283.9 303.3 334.3 359.4	50.6 69.5 69.3 65.6 71.8 73.0 73.2 74.5 79.2 82.7	590.9 678.2 745.7 808.4 851.8 946.3 990.4 1,004.0 1,064.4 1,143.7	134.0 157.5 185.3 209.9 227.4 252.7 273.4 282.0 290.4 303.6	130.9 153.9 180.7 204.4 220.9 245.1 265.4 273.9 281.9 294.8	12.7 13.1 12.3 11.8 15.9 16.2 14.1 11.6 10.5 9.6	23.2 26.9 27.4 28.6 30.4 33.5 35.9 40.0 44.5 48.4	32.1 39.1 46.6 52.6 57.5 65.8 70.2 75.1 78.9 85.0	86.6 100.3 108.2 123.0 113.4 129.0 120.6 124.1 130.4 137.4	118.5 139.6 156.0 170.7 178.2 188.6 198.8 207.4 219.3 232.5	52.5 68.8 85.0 89.8 111.1 129.5 136.0 138.6 151.8 169.0	131.3 133.0 125.0 121.8 117.9 131.0 141.4 125.2 138.7 158.3	-73.8 -79.0 -128.0 -207.8 -185.4 -212.3 -221.2 -149.7 -155.2 -152.6
1,032.0 1,055.0 1,091.2 1,154.3 1,258.6 1,351.8 1,453.1 1,579.2 1,721.7 1,827.5	466.9 467.8 476.0 509.7 543.1 590.2 656.4 737.5 828.6 879.5	93.5 98.1 100.3 117.5 140.4 157.0 171.8 182.3 188.7 184.7	380.0 396.0 413.7 428.3 461.5 484.5 509.4 539.4 571.8 611.8	120.1 132.6 151.5	1,253.0 1,324.2 1,381.5 1,409.4 1,461.8 1,515.8 1,560.5 1,601.1 1,652.5 1,701.8	299.3 273.3 298.3 291.1 281.6 272.1 265.7 270.5 268.2 274.8	289.7 262.3 286.8 278.5 268.6 259.4 253.1 258.3 255.8 261.2	13.8 15.8 16.1 17.2 17.1 16.4 13.5 15.2 13.1	57.7 71.2 89.5 99.4 107.1 115.4 119.4 123.8 131.4 141.0	98.1 104.5 119.0 130.6 144.7 159.9 174.2 190.0 192.8 190.4	148.7 172.5 199.6 210.0 217.2 223.8 229.7 235.0 237.8 242.5	248.6 269.0 287.6 304.6 319.6 335.8 349.7 365.3 379.2 390.0	184.3 194.4 199.3 198.7 202.9 232.1 241.1 244.0 241.1 229.8	202.5 223.5 172.1 157.9 171.5 160.2 167.2 157.3 188.9 218.1	-221.0 -269.2 -290.3 -255.1 -203.2 -164.0 -107.4 -21.9 69.3 125.6
1,991.1 1,853.1 1,782.3 1,880.1 2,153.6 2,406.9 2,568.0 2,524.0 2,105.0 2,165.1	994.3 858.3 793.7 809.0 927.2 1,043.9 1,163.5 1,145.7 915.3 935.8	207.3 151.1 148.0 131.8 189.4 278.3 353.9 370.2 304.3 138.2	652.9 694.0 700.8 713.0 733.4 794.1 837.8 869.6 900.2 890.9	146.0 143.9 148.4 154.0 171.2 164.7 173.8 160.5 196.9	2,159.9 2,292.9 2,472.0 2,655.1 2,728.7 2,982.6 3,517.7 3,720.7	294.4 304.7 348.5 404.7 455.8 495.3 521.8 551.3 616.1 661.0 719.2	281.0 290.2 331.8 387.1 436.4 474.1 499.3 528.5 594.6 636.7	17.2 16.5 22.3 21.2 26.9 34.6 29.5 28.5 28.9 37.5	154.5 172.2 196.5 219.5 240.1 250.5 252.7 266.4 280.6 334.3 372.3	197.1 217.4 230.9 249.4 269.4 298.6 329.9 375.4 390.8 430.1	253.7 269.8 312.7 334.6 333.1 345.8 352.5 366.0 431.3 533.2 685.9	409.4 433.0 456.0 474.7 495.5 523.3 548.5 586.2 617.0 683.0 721.5	222.9 206.2 170.9 153.1 160.2 184.0 226.6 237.1 252.8 186.9	239.7 243.2 273.1 302.6 311.8 339.8 393.5 317.9 365.2 651.6 525.8	236.2 128.2 -157.8 -377.6 -412.7 -318.3 -248.2 -160.7 -458.6 -1,412.7 -1,555.6 -1,266.7
	Total  24.0 43.7 45.2 33.84.5 41.6 41.6 43.0 43.9 44.7 65.5 67.7 65.5 77.9 92.5 93.4 43.7 65.5 66.2 93.4 116.8 118.8 118.8 118.8 118.9 112.6 116.8 118.8 118.9 112.6 116.8 118.9 112.6 116.8 118.9 112.6 116.8 118.9 117.0 117	Total landi-   Total	Total   Indi-   Corpo-   Vidual   ration   income   taxes	Total lindi- come income taxes linsurance and retirement linguist linguis	Total   Indi-   Corpo-   Insurance   And   Total   Corpo-   Insurance   And   Total   Corpo-   Insurance   And   Insurance   And   Insurance   And   Insurance   And   And	Total	Total   Indi-	Total   Indi-   Ind	Total   Indi-   Corpo- vidual raxes   Social insurant receipts   Total   Total   Total   Corpo- vidual raxes   Total retirement receipts   Total   Total   Depart principal rates   Total   Total   Depart principal rates   Total	Total   Indi-   Ind	Total   Indi-   Corpor   India   Corpor   India   I	Total   India   Corpo   India   Corpo   India   India   Corpo   India   Ind	Total	Total	Total

Note: See Note, Table B-78.

Sources: Department of the Treasury and Office of Management and Budget.

D		Act	ual		Esti	mates
Description	2006	2007	2008	2009	2010	2011
RECEIPTS, OUTLAYS, AND SURPLUS OR DEFICIT						
Total:  Receipts Outlays Surplus or deficit (-) On-budget:	2,406,876 2,655,057 -248,181	2,568,001 2,728,702 -160,701	2,523,999 2,982,554 -458,555	2,104,995 3,517,681 -1,412,686	2,165,119 3,720,701 –1,555,582	2,567,181 3,833,861 -1,266,680
Receipts Outlays Surplus or deficit (–) Off-budget:	1,798,494 2,232,988 -434,494	1,932,912 2,275,065 -342,153	1,865,953 2,507,803 -641,850	1,450,986 3,000,665 -1,549,679	1,529,936 3,163,742 -1,633,806	1,893,113 3,255,668 -1,362,555
Receipts Outlays Surplus or deficit (–)	608,382 422,069 186,313	635,089 453,637 181,452	658,046 474,751 183,295	654,009 517,016 136,993	635,183 556,959 78,224	674,068 578,193 95,875
OUTSTANDING DEBT, END OF PERIOD  Gross Federal debt	8,451,350 3,622,378 4,828,972 768,924 4,060,048	8,950,744 3,915,615 5,035,129 779,632 4,255,497	9,986,082 4,183,032 5,803,050 491,127 5,311,923	11,875,851 4,331,144 7,544,707 769,160 6,775,547	13,786,615 4,488,962 9,297,653	15,144,029 4,645,704 10,498,325
RECEIPTS BY SOURCE						
Total: On-budget and off-budget Individual income taxes Corporation income taxes Social insurance and retirement receipts On-budget Off-budget	2,406,876 1,043,908 353,915 837,821 229,439 608,382	2,568,001 1,163,472 370,243 869,607 234,518 635,089	2,523,999 1,145,747 304,346 900,155 242,109 658,046	2,104,995 915,308 138,229 890,917 236,908 654,009	2,165,119 935,771 156,741 875,756 240,573 635,183	2,567,181 1,121,296 296,902 935,116 261,048 674,068
Excise taxes Estate and gift taxes Customs duties and fees Miscellaneous receipts Deposits of earnings by Federal Reserve System Allowances	73,961 27,877 24,810 44,584 29,945	65,069 26,044 26,010 47,556 32,043	67,334 28,844 27,568 50,005 33,598	62,483 23,482 22,453 52,123 34,318	73,204 17,011 23,787 82,849 77,083 –12,000	74,288 25,035 27,445 87,099 79,341 –9,000
All other	14,639	15,513	16,407	17,805	17,766	16,758
OUTLAYS BY FUNCTION Total: On-budget and off-budget National defense	2,655,057 521,827 29,499 23,584 782 33,028 25,969 6,187 7,262 -1,075	2,728,702 551,271 28,482 25,525 -860 31,732 17,662 487 -4,606 5,093	2,982,554 616,073 28,857 27,731 628 31,825 18,387 27,870 25,453 2,417	3,517,681 661,049 37,529 29,449 4,749 35,574 22,237 291,535 291,231 304	3,720,701 719,179 51,138 33,032 18,952 47,039 26,610 -25,319 -31,745 6,426	3,833,861 749,748 54,192 31,554 24,863 42,537 25,590 22,127 17,901 4,226
Transportation	70,244 54,465 118,482 252,739 329,868 352,477 548,549 16,058 532,491	72,905 29,567 91,656 266,382 375,407 365,975 586,153 19,307 566,846	77,616 23,952 91,287 280,599 390,758 431,313 617,027 17,830 599,197	84,289 27,650 79,746 334,327 430,093 533,224 682,963 34,071 646,892	106,458 28,469 142,521 372,336 457,159 685,870 721,496 37,629 683,867	104,189 31,973 126,399 400,661 497,341 595,005 736,284 27,664 708,620
Veterans benefits and services Administration of justice General government Net interest On-budget Off-budget	69,811 41,016 18,177 226,603 324,325 –97,722	72,818 41,244 17,425 237,109 343,112 –106,003	84,653 47,138 20,325 252,757 366,475 –113,718	95,429 51,549 22,026 186,902 304,856 –117,954	124,655 55,025 29,290 187,772 306,176 –118,404	124,539 57,280 27,670 250,709 369,789 –119,080
Allowances Undistributed offsetting receipts On-budget Off-budget	-68,250 -56,625 -11,625	-82,238 -69,939 -12,299	-86,242 -73,097 -13,145	-92,639 -78,413 -14,226	18,750 -79,731 -64,801 -14,930	21,676 -90,476 -74,903 -15,573

<sup>&</sup>lt;sup>1</sup> Includes Allowances for Health Reform and the Jobs Bill.

Note: See Note, Table B-78.

Sources: Department of the Treasury and Office of Management and Budget.

 $\begin{array}{c} \text{Table B-82. Federal and State and local government current receipts and expenditures,} \\ \text{national income and product accounts (NIPA), } 1960-2009 \end{array}$ 

	To	otal governme			deral Governm		State a	and local gove	rnment	Adden-
Year or quarter	Current receipts	Current expendi- tures	Net govern- ment saving (NIPA)	Current receipts	Current expendi- tures	Net Federal Govern- ment saving (NIPA)	Current receipts	Current expendi- tures	Net State and local govern- ment saving (NIPA)	dum: Grants- in-aid to State and local govern- ments
1960	134.4 139.0 150.6 162.2 166.6 180.3 202.8 202.8 202.8 303.6 347.0 339.4 442.1 505.9 567.3 646.1 728.9 798.7 991.7 993.3 1,101.3 1,202.1 1,202.	123.0 132.2 142.9 151.2 159.3 170.6 192.8 220.0 247.0 255.2 325.8 3366.5 3366.3 3366.5 436.9 966.9 1.076.8 966.9 1.076.0 1.464.0 1.540.5 1.741.0 1.540.5 1.741.0 1.540.5 1.741.0 1.540.5 1.741.0 1.540.5 1.741.0 2.149.0 2.412.5 2.555.7 2.561.1 2.304.0 2.412.5 2.555.7 2.561.1 2.304.0 2.412.5 2.555.7 2.561.1 2.461.0 2.412.5 2.555.7 2.561.1 2.461.0 2.412.5 2.555.7 2.561.1 2.461.0 2.412.5 2.555.7 2.561.1 2.461.0 2.412.5 2.555.7 2.561.1 2.461.0 2.412.5 2.461.0 2.412.5 2.561.1 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.412.5 2.461.0 2.461	(NIPA)  11.4 6.8 7.7 11.0 7.3 9.8 8.100 -2.3 5.1 16.5 16.5	93.9 95.5 103.6 111.8 121.0 138.0 146.9 171.3 192.7 186.1 191.9 220.3 3250.8 280.0 277.6 323.0 324.0 486.9 532.8 6619.9 617.4 643.3 710.0 774.4 816.0 896.5 1,038.0 1,082.8 1,101.9 1,124.1 1,477.8 1,177.9 1,189.0 1,224.1 1,477.8 1,189.3 1,895.0 1,895.0 1,895.0 1,895.0 1,895.0 2,606.8 2,475.0 2,473.8 2,547.4 2,547.8 2,547.8 2,547.8 2,547.8	86.8 92.9 101.2 106.5 110.9 117.7 135.7 184.1 201.6 220.6 2245.2 262.6 234.5 338.3 376.7 410.1 452.9 509.9 589.5 676.7 752.6 881.5 953.0 1,010.7 1,045.9 1,172.0 1,594.5 1,614.0 1,744.3 1,744.3 1,746.3 1,746.3 1,746.3 1,746.3 1,776.2 1,776.2 1,776.2 1,576.3 1,676.7 1,776.3 1,776.2 1,576.3 1,676.7 1,776.3 1,776.2 1,776.2 1,776.3 1,776.3 1,776.2 1,776.2 1,776.3 1,776.3 1,776.2 1,776.3 1,776.2 1,776.3 1,776.2 1,776.3 1,776.3 1,776.2 1,776.3 1,776.2 1,776.3 1,776.2 1,776.3 1,776.2 1,776.3 1,776.2 1,776.3 1,776.2 1,776.3 1,776		44.5 48.1 52.0 56.0 61.3 36.65 74.9 38.5 120.1 134.9 158.4 174.3 188.1 120.9 6 63.5 50.6 687.5 738.0 287.6 687.5 738.0 120.1 158.4 28.6 28.8 2.2 944.8 99.1 9.1 1.045.	40.2 43.8 46.8 50.3 54.9 60.0 67.2 75.5 86.0 91.2 128.5 113.0 128.5 128.6 128.7 226.3 226.	saving	govern-
2007: I II	4,064.9 4,167.4 4,202.8 4,212.3 4,254.2	4,192.0 4,335.5 4,389.1 4,450.7	-127.0 -168.1 -186.3 -238.4 -266.3	2,547.4 2,575.1 2,640.1 2,660.1 2,659.9	2,762.9 2,738.1 2,841.0 2,881.3 2,918.7 2,947.9	-163.0 -200.9 -221.3 -258.8 -265.0	1,845.3 1,902.3 1,923.4 1,932.1	1,809.4 1,869.5 1,888.4 1,911.7 1,952.9	35.9 32.8 34.9 20.3	355.5 375.0 380.7 379.7
IV 2008: I II IV	4,254.2 4,172.0 3,974.5 4,087.0 3,996.8	4,520.5 4,625.5 4,797.0 4,811.7 4,726.9	-206.3 -453.5 -822.5 -724.8 -730.2	2,682.9 2,590.7 2,372.1 2,489.5 2,447.8	2,947.9 3,024.2 3,169.0 3,155.2 3,121.9	-265.0 -433.5 -796.9 -665.7 -674.1	1,951.6 1,963.7 1,994.2 1,987.5 1,951.4	1,983.8 2,019.8 2,046.5 2,007.5	-1.3 -20.1 -25.5 -59.0 -56.1	380.3 382.5 391.8 390.0 402.4
2009: I II IV P	3,775.0 3,728.4	4,780.6 5,021.9 5,077.0 5,092.3	-1,005.7 -1,293.5 -1,342.0	2,251.3 2,237.0 2,215.1	3,220.3 3,505.9 3,542.1 3,549.7	-969.1 -1,268.9 -1,327.0	1,961.4 1,989.3 2,003.6	1,998.0 2,013.9 2,018.6 2,029.8	-36.6 -24.6 -14.9	437.7 497.9 483.7 487.2

Note: Federal grants-in-aid to State and local governments are reflected in Federal current expenditures and State and local current receipts. Total government current receipts and expenditures have been adjusted to eliminate this duplication.

Source: Department of Commerce (Bureau of Economic Analysis).

TABLE B-83. Federal and State and local government current receipts and expenditures, national income and product accounts (NIPA), by major type, 1960-2009

				Cui	rrent recei	pts					Curre	nt expend	itures		
Year or quarter	Total	Total <sup>1</sup>	Per- sonal current taxes	Taxes on produc- tion and imports	Taxes on corpo- rate income	Contri- butions for govern- ment social insur- ance	Income re- ceipts on assets	Current trans- fer re- ceipts	Current surplus of govern- ment enter- prises	Total <sup>2</sup>	Con- sump- tion expen- ditures	Current trans- fer pay- ments	Interest pay- ments	Sub- si- dies	Net govern- ment saving
1960 1961 1962 1963 1964 1965 1966 1967 1968	 134.4 139.0 150.6 162.2 166.6 180.3 202.8 217.7 252.1 283.5	113.4 117.1 126.1 134.4 137.5 149.5 163.5 173.8 203.1 228.4	46.1 47.3 51.6 54.6 52.1 57.7 66.4 73.0 87.0 104.5	44.5 47.0 50.4 53.4 57.3 60.7 63.2 67.9 76.4 83.9	22.7 22.8 24.0 26.2 28.0 30.9 33.7 32.7 39.4 39.7	16.5 17.1 19.2 21.7 22.5 23.5 31.4 35.0 38.8 44.3	2.7 2.9 3.2 3.4 3.7 4.1 4.7 5.5 6.4 7.0	0.9 1.1 1.2 1.3 1.6 1.9 2.2 2.5 2.6 2.7	0.9 .8 .9 1.4 1.3 1.3 1.0 .9 1.2	123.0 132.2 142.9 151.2 159.3 170.6 192.8 220.0 247.0 267.0	83.3 88.2 96.8 102.7 108.6 115.9 131.8 149.5 165.7 178.2	28.1 31.9 32.8 34.3 35.1 38.0 42.0 50.3 58.4 64.1	10.4 10.2 11.1 12.0 12.9 13.7 15.1 16.4 18.8 20.2	1.1 2.0 2.3 2.2 2.7 3.0 3.9 3.8 4.2 4.5	11.4 6.8 7.7 11.0 7.3 9.8 10.0 -2.3 5.1 16.5
1970 1971 1972 1973 1974 1975 1976 1977 1978	286.9 303.6 347.0 390.4 431.8 442.1 505.9 567.3 646.1 728.9	229.2 240.3 273.8 299.3 328.1 334.3 383.6 431.0 484.8 537.9	103.1 101.7 123.6 132.4 151.0 147.6 172.3 197.5 229.4 268.7	91.4 100.5 107.9 117.2 124.9 135.3 146.4 159.7 170.9 180.1	34.4 37.7 41.9 49.3 51.8 50.9 64.2 73.0 83.5 88.0	46.6 51.5 59.6 76.0 85.8 89.9 102.0 113.9 132.1	8.2 9.0 9.5 11.6 14.4 16.1 16.3 18.4 23.2 30.8	2.9 3.1 3.6 3.9 4.5 5.1 5.8 6.8 8.2 9.4	.0 2 .5 4 9 -3.2 -1.8 -2.7 -2.2 -2.9	295.2 325.8 356.3 386.5 436.9 510.2 552.2 600.3 656.3 729.9	190.1 204.7 220.8 234.8 261.7 294.6 316.6 346.6 376.5 412.3	77.3 92.2 103.0 115.2 135.9 171.3 184.3 195.9 210.9 236.0	23.1 24.5 26.3 31.3 35.6 40.0 46.3 50.8 60.2 72.9	4.8 4.7 6.6 5.2 3.3 4.5 5.1 7.1 8.9 8.5	-8.4 -22.2 -9.3 3.9 -5.2 -68.2 -46.3 -33.0 -10.2 -1.0
1980 1981 1982 1983 1984 1985 1986 1988 1989	 798.7 917.7 939.3 1,000.3 1,113.5 1,214.6 1,290.1 1,403.2 1,502.4 1,627.2	585.6 663.5 659.5 694.1 762.5 823.9 868.8 965.7 1,018.9 1,109.2	298.9 345.2 354.1 352.3 377.4 417.3 437.2 489.1 504.9 566.1	200.3 235.6 240.9 263.3 289.8 308.1 323.4 347.5 374.5 398.9	84.8 81.1 63.1 77.2 94.0 96.5 106.5 127.1 137.2 141.5	167.2 196.9 210.1 227.2 258.8 282.8 304.9 324.6 363.2 386.9	39.9 50.2 58.9 65.3 74.3 84.0 89.7 85.6 89.9 93.7	11.1 12.7 15.3 16.9 19.7 23.4 25.9 27.0 27.9 32.5	-5.1 -5.6 -4.5 -3.2 -1.9 .6 .9 .2 2.6 4.9	846.5 966.9 1,076.8 1,171.7 1,261.0 1,370.9 1,464.0 1,540.5 1,623.6 1,741.0	465.9 520.6 568.1 610.5 657.6 720.1 776.1 815.1 852.8 902.9	281.7 318.1 354.7 382.5 395.3 420.4 446.6 464.4 493.6 538.1	89.1 116.7 138.9 156.9 187.3 208.8 216.3 230.8 247.7 272.5	9.8 11.5 15.0 21.3 21.1 21.4 24.9 30.3 29.5 27.4	-47.8 -49.2 -137.5 -171.4 -147.5 -156.3 -173.9 -137.4 -121.2 -113.8
1990 1991 1992 1993 1994 1995 1996 1998 1999	1,709.3 1,759.7 1,845.1 1,948.2 2,091.9 2,215.5 2,380.4 2,557.2 2,729.8 2,902.5	1,161.3 1,179.9 1,239.7 1,317.8 1,425.6 1,516.7 1,641.5 1,780.0 1,910.8 2,035.8	592.7 586.6 610.5 646.5 690.5 743.9 832.0 926.2 1,026.4 1,107.5	425.0 457.1 483.4 503.1 545.2 557.9 580.8 611.6 639.5 673.6	140.6 133.6 143.1 165.4 186.7 211.0 223.6 237.1 239.2 248.8	412.1 432.2 457.1 479.6 510.7 535.5 557.9 590.3 627.8 664.6	98.0 97.0 89.6 86.8 86.0 91.8 99.9 103.6 102.7 106.4	36.3 44.9 50.5 55.3 60.0 58.4 66.8 69.3 75.3 81.7	1.6 5.7 8.2 8.7 9.6 13.1 14.4 14.1 13.3	1,879.5 1,984.0 2,149.0 2,229.4 2,304.0 2,412.5 2,505.7 2,581.1 2,649.3 2,761.9	966.0 1,015.8 1,050.4 1,075.4 1,108.9 1,141.4 1,176.7 1,222.1 1,263.2 1,343.9	592.4 628.9 756.3 804.6 839.9 882.4 929.2 954.6 978.1 1,014.9	294.2 311.7 312.3 312.7 322.7 353.9 364.6 370.6 371.6 357.9	27.0 27.5 30.1 36.7 32.5 34.8 35.2 33.8 36.4 45.2	-170.3 -224.2 -303.9 -281.2 -212.2 -197.0 -125.3 -23.8 80.5 140.6
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 <i>p</i>	3,132.4 3,118.2 2,967.9 3,043.4 3,265.7 3,659.3 3,995.2 4,209.2 4,057.6	2,202.8 2,163.7 2,002.1 2,047.9 2,213.2 2,546.8 2,807.4 2,960.6 2,758.0	1,232.3 1,234.8 1,050.4 1,000.3 1,047.8 1,208.6 1,352.4 1,490.9 1,432.4 1,107.6	708.6 727.7 762.8 806.8 863.4 930.2 986.8 1,028.7 1,047.3 1,023.9	254.7 193.5 181.3 231.8 292.0 395.9 454.2 426.7 263.3	709.4 736.9 755.2 782.8 831.7 877.4 926.4 964.2 995.6 978.3	118.8 114.6 99.9 96.8 100.3 111.9 129.6 143.3 144.2 164.3	92.3 98.9 104.3 108.9 119.3 126.7 136.0 147.7 166.7 189.0	9.1 4.0 6.3 7.0 1.2 -3.5 -4.2 -6.6 -6.9 -8.1	2,906.0 3,093.6 3,274.7 3,458.6 3,653.5 3,916.4 4,147.9 4,424.0 4,740.3 4,993.0	1,426.6 1,524.4 1,639.9 1,756.8 1,860.4 1,977.9 2,093.3 2,214.9 2,386.9 2,417.8	1,071.5 1,169.0 1,280.9 1,354.8 1,440.1 1,534.9 1,631.0 1,743.3 1,904.0 2,136.4	362.0 341.5 312.6 298.0 306.6 342.7 372.2 411.0 395.9 379.1	45.8 58.7 41.4 49.1 46.4 60.9 51.4 54.8 53.5 59.7	226.5 24.6 -306.9 -415.2 -387.8 -257.1 -152.7 -214.8 -682.7
III	 3,919.8 3,971.1 4,024.8 4,064.9	2,747.6 2,791.1 2,835.1 2,855.7	1,321.5 1,340.2 1,354.3 1,393.5	971.5 983.3 991.6 1,000.7	443.4 456.4 477.2 439.7	920.0 921.9 925.3 938.4	122.2 127.4 132.0 136.9	132.4 134.5 137.0 139.9	-2.4 -3.8 -4.7 -6.0	4,064.5 4,137.3 4,197.8 4,192.0	2,064.8 2,083.1 2,105.8 2,119.7	1,590.0 1,627.3 1,651.2 1,655.5	354.1 375.4 391.1 368.2	55.6 51.4 49.8 48.7	-144.7 -166.2 -173.1 -127.0
2007: I II. III	 4,167.4 4,202.8 4,212.3 4,254.2	2,935.1 2,963.1 2,960.4 2,983.6	1,459.5 1,481.8 1,500.7 1,521.9	1,015.3 1,025.2 1,032.2 1,042.3	447.4 442.0 414.3 403.2	957.3 958.5 963.4 977.5	140.4 142.8 144.9 145.1	143.0 145.3 148.5 153.9	-8.4 -6.9 -4.9 -6.0	4,335.5 4,389.1 4,450.7 4,520.5	2,152.2 2,197.2 2,234.3 2,275.9	1,730.7 1,714.4 1,744.5 1,783.7	403.3 419.1 415.8 405.5	49.2 58.3 56.0 55.4	-168.1 -186.3 -238.4 -266.3
. 	 4,172.0 3,974.5 4,087.0 3,996.8	2,884.1 2,679.8 2,786.2 2,681.8	1,531.8 1,326.2 1,437.3 1,434.3	1,042.5 1,050.8 1,058.5 1,037.3	295.0 288.4 275.7 194.2	990.3 993.9 999.9 998.4	143.7 145.1 143.2 144.6	159.4 162.0 164.5 181.0	-5.6 -6.3 -6.9 -8.9	4,625.5 4,797.0 4,811.7 4,726.9	2,332.5 2,381.5 2,436.4 2,397.1	1,825.2 1,966.7 1,898.7 1,925.3	414.6 395.9 423.8 349.3	53.1 52.9 52.9 55.2	-453.5 -822.5 -724.8 -730.2
2009: I II.	 3,775.0 3,728.4 3,735.0	2,463.7 2,395.4 2,416.7	1,187.3 1,082.6 1,086.1 1,074.4	1,018.8 1,019.6 1,023.1 1,034.3	244.2 281.2 296.7	974.8 976.0 979.0 983.4	156.5 166.5 165.7 168.5	190.7 199.3 180.0 186.1	-10.7 -8.8 -6.3 -6.6	4,780.6 5,021.9 5,077.0 5,092.3	2,378.6 2,409.0 2,431.0 2,452.4	2,009.2 2,175.2 2,174.4 2,186.8	337.3 382.8 403.8 392.6	55.5 54.9 67.7 60.5	-1,005.7 -1,293.5 -1,342.0

Source: Department of Commerce (Bureau of Economic Analysis).

<sup>1</sup> Includes taxes from the rest of the world, not shown separately.
2 Includes an item for the difference between wage accruals and disbursements, not shown separately.

Table B–84. Federal Government current receipts and expenditures, national income and product accounts (NIPA), 1960-2009

		Current receipts										Current expenditures				
Year quart		Total	Total <sup>1</sup>	Per- sonal current taxes	Taxes on produc- tion and	Taxes on corpo- rate	Contri- butions for govern- ment social insur-	Income re- ceipts on assets	Current trans- fer re- ceipts	Current surplus of govern- ment enter-	Total <sup>2</sup>	Con- sump- tion expen- ditures	Current trans- fer pay- ments 3	Interest pay- ments	Sub- si- dies	Net Federal Govern- ment saving
1960		93.9	76.5	41.8	imports	income 21.4	ance 16.0	1.4	0.4	prises -0.3	86.8	49.7	27.6	8.4	1.1	7.1
1961 1962 1963 1964 1965 1966 1968 1969		95.5 103.6 111.8 111.8 121.0 138.0 146.9 171.3 192.7	77.5 83.3 88.6 87.7 95.6 104.7 109.8 129.7 146.0	42.7 46.5 49.1 46.0 51.1 58.6 64.4 76.4 91.7	13.2 14.1 14.7 15.4 15.4 14.4 15.2 16.9 17.8	21.5 22.5 24.6 26.1 28.9 31.4 30.0 36.1 36.1	16.6 18.6 21.1 21.8 22.7 30.6 34.1 37.9 43.3	1.5 1.7 1.8 1.8 1.9 2.1 2.5 2.9 2.7	.5 .6 .7 1.1 1.2 1.1 1.1	5 3 3 6 6 3 4	92.9 101.2 106.5 110.9 117.7 135.7 156.2 173.7 184.1	51.6 57.8 60.8 62.8 65.7 75.7 87.0 95.3 98.3	31.4 32.5 34.2 35.4 38.5 44.4 52.8 59.7 65.5	7.9 8.6 9.3 10.0 10.6 11.6 12.7 14.6 15.8	2.0 2.3 2.2 2.7 3.0 3.9 3.8 4.1 4.5	2.6 2.4 5.3 .9 3.2 2.3 -9.3 -2.4 8.6
1975 1976 1977 1978		186.1 191.9 220.3 250.8 280.0 277.6 323.0 364.0 424.0 486.9	137.9 138.6 158.2 173.0 192.1 186.8 217.9 247.2 286.6 325.9	88.9 85.8 102.8 109.6 126.5 120.7 141.2 162.2 188.9 224.6	18.1 19.0 18.5 19.8 20.1 22.1 21.4 22.7 25.3 25.7	30.6 33.5 36.6 43.3 45.1 43.6 54.6 61.6 71.4 74.4	45.5 50.3 58.3 74.5 84.1 88.1 99.8 111.1 128.7 149.8	3.1 3.5 3.6 3.8 4.2 4.9 5.9 6.7 8.5 10.7	1.1 1.3 1.3 1.4 1.5 1.6 2.0 2.7 3.1	-1.5 -1.6 -1.1 -1.8 -1.8 -3.6 -2.2 -3.0 -2.5 -2.6	201.6 220.6 245.2 262.6 294.5 348.3 376.7 410.1 452.9 500.9	98.6 101.9 107.6 108.8 117.9 129.5 137.1 150.7 163.3 178.9	80.5 96.1 112.7 125.9 146.9 185.6 200.9 215.5 235.7 258.0	17.7 17.9 18.8 22.8 26.0 28.9 33.8 37.1 45.3 55.7	4.8 4.6 6.6 5.1 3.2 4.3 4.9 6.9 8.7 8.2	-15.5 -28.7 -24.9 -11.8 -14.5 -70.6 -53.7 -46.1 -28.9 -14.0
1981 1982 1983 1984 1985 1986 1988		532.8 619.9 617.4 643.3 710.0 774.4 816.0 896.5 958.5 1,038.0	355.5 407.7 386.3 393.2 425.2 460.2 479.2 543.6 566.2 621.2	250.0 290.6 295.0 286.2 301.4 336.0 350.0 392.5 402.8 451.5	33.7 49.9 41.0 44.4 47.3 46.1 43.7 45.9 49.8 49.7	70.3 65.7 49.0 61.3 75.2 76.3 83.8 103.2 111.1 117.2	163.6 193.0 206.0 223.1 254.1 277.9 298.9 317.4 354.8 378.0	13.7 18.3 22.2 23.8 26.6 29.1 31.3 27.5 29.4 28.0	3.9 4.1 5.7 6.1 7.4 9.7 8.5 11.0 10.5	-3.9 -3.2 -2.9 -3.0 -3.4 -2.6 -1.9 -3.0 -2.3 -1.7	589.5 676.7 752.6 819.5 881.5 953.0 1,010.7 1,045.9 1,096.9 1,172.0	207.4 238.3 263.3 286.4 309.9 338.3 358.0 373.7 381.7 398.5	302.9 333.5 363.0 387.2 400.8 424.0 449.9 457.6 486.8 527.1	69.7 93.9 111.8 124.6 150.3 169.4 178.2 184.6 199.3 219.3	9.4 11.1 14.6 20.9 20.7 21.0 24.6 30.0 29.2 27.1	-56.6 -56.8 -135.3 -176.2 -171.5 -178.6 -194.6 -149.3 -138.4 -133.9
1991 1992 1993 1994 1996 1997 1998		1,082.8 1,101.9 1,148.0 1,224.1 1,322.1 1,407.8 1,526.4 1,656.2 1,777.9 1,895.0	642.2 635.6 659.9 713.0 781.4 844.6 931.9 1,030.1 1,115.8 1,195.4	470.1 461.3 475.2 505.5 542.5 585.8 663.3 744.2 825.2 893.0	50.9 61.8 63.3 66.4 79.0 75.6 72.9 77.8 80.7 83.4	118.1 109.9 118.8 138.5 156.7 179.3 190.6 203.0 204.2 213.0	402.0 420.6 444.0 465.5 496.2 521.9 545.4 579.4 617.4 654.8	29.6 29.1 24.8 25.5 22.7 23.3 26.5 25.4 21.2 20.6	14.2 18.2 19.4 21.3 22.8 18.4 23.8 21.3 22.6 23.4	-5.3 -1.6 .0 -1.3 9 3 -1.2 1	1,259.2 1,320.3 1,450.5 1,504.3 1,542.5 1,614.0 1,674.7 1,716.3 1,744.3	419.0 438.3 444.1 441.2 440.7 440.1 446.5 457.5 454.6 473.3	576.2 604.0 725.4 773.4 808.3 849.0 896.0 925.4 954.9	237.5 250.9 251.3 253.4 261.3 290.4 297.3 300.0 298.8 282.7	26.6 27.1 29.7 36.3 32.2 34.5 34.9 33.4 35.9 44.8	-176.4 -218.4 -302.5 -280.2 -220.4 -206.2 -148.2 -60.1 33.6 98.8
2000 2001 2002 2003 2004 2005 2006		2,057.1 2,020.3 1,859.3 1,885.1 2,013.9 2,290.1 2,524.5 2,660.8 2,475.0	1,309.6 1,249.4 1,073.5 1,070.2 1,153.8 1,383.7 1,558.3 1,647.2 1,421.7	995.6 991.8 828.6 774.2 799.2 931.9 1,049.9 1,168.1 1,102.5 836.5	87.3 85.3 86.8 89.3 94.3 98.8 99.4 94.7 92.0 92.4	219.4 164.7 150.5 197.8 250.3 341.0 395.0 370.2 212.3	698.6 723.3 739.3 762.8 807.6 852.6 904.6 944.4 974.5 956.4	24.5 24.5 20.3 22.8 23.2 23.7 26.1 29.1 30.3 48.3	25.7 27.0 26.1 25.6 29.0 33.6 38.3 42.7 52.3 68.1	-1.2 -4.0 .2 3.7 .3 -3.5 -2.9 -2.7 -3.8 -4.9	1,871.9 1,979.8 2,112.1 2,261.5 2,393.4 2,573.1 2,728.3 2,897.2 3,117.6 3,454.5	496.0 530.2 590.5 660.3 721.4 765.8 811.0 848.8 934.4 986.8	1,047.4 1,140.0 1,252.1 1,339.4 1,405.0 1,491.3 1,587.1 1,688.6 1,840.6 2,137.1	283.3 258.6 229.1 212.9 221.0 255.4 279.2 312.2 292.0 272.3	45.3 51.1 40.5 49.0 46.0 60.5 51.0 47.6 50.6 58.3	185.2 40.5 -252.8 -376.4 -379.5 -283.0 -203.8 -236.5 -642.6
	        V	2,473.8 2,501.8 2,547.4 2,575.1	1,517.6 1,541.6 1,581.3 1,592.8	1,023.1 1,034.7 1,053.9 1,088.0	99.6 99.6 99.9 98.6	383.8 396.1 415.5 384.6	896.9 899.8 904.0 917.8	24.3 25.5 26.5 28.2	37.1 37.7 38.6 39.9	-2.1 -2.7 -3.0 -3.6	2,681.1 2,731.2 2,762.9 2,738.1	810.4 808.5 813.1 812.1	1,552.4 1,588.9 1,603.7 1,603.5	263.1 282.8 296.7 274.2	55.2 51.1 49.4 48.3	-207.3 -229.4 -215.5 -163.0
2007: I	I V	2,640.1 2,660.1 2,659.9 2,682.9	1,638.3 1,654.0 1,644.8 1,651.7	1,136.8 1,157.6 1,177.6 1,200.6	94.9 94.8 95.4 93.6	393.6 387.3 358.5 341.3	937.3 938.8 943.8 957.6	28.3 28.7 29.6 29.8	41.0 41.5 42.6 45.8	-4.8 -2.9 8 -2.1	2,841.0 2,881.3 2,918.7 2,947.9	821.1 839.9 860.8 873.4	1,666.2 1,672.4 1,694.1 1,721.6	306.4 321.3 316.6 304.7	47.4 47.7 47.3 48.2	-200.9 -221.3 -258.8 -265.0
2008: I	     V	2,590.7 2,372.1 2,489.5 2,447.8	1,546.0 1,322.8 1,435.2 1,382.9	1,195.3 984.2 1,110.1 1,120.2	92.7 93.1 91.8 90.2	243.1 231.2 218.5 156.5	970.0 973.0 978.5 976.4	29.3 31.2 30.6 30.0	47.9 48.4 49.0 64.0	-2.5 -3.4 -3.9 -5.4	3,024.2 3,169.0 3,155.2 3,121.9	903.2 923.2 956.0 955.4	1,759.5 1,904.5 1,829.0 1,869.5	312.3 291.4 319.5 244.6	49.2 49.9 50.7 52.4	-433.5 -796.9 -665.7 -674.1
2009: I I		2,251.3 2,237.0 2,215.1	1,191.5 1,157.4 1,153.2	900.3 829.9 811.0 804.7	85.7 91.6 93.5 98.7	192.0 223.8 238.1	953.0 954.3 957.1 961.3	40.7 50.8 49.5 52.1	72.7 79.8 58.7 61.2	-6.7 -5.3 -3.5 -4.3	3,220.3 3,505.9 3,542.1 3,549.7	954.2 979.1 1,001.2 1,012.8	1,981.2 2,195.6 2,178.1 2,193.5	231.3 277.4 296.3 284.1	53.6 53.7 66.5 59.3	-969.1 -1,268.9 -1,327.0

Source: Department of Commerce (Bureau of Economic Analysis).

Includes taxes from the rest of the world, not shown separately,
 Includes an item for the difference between wage accruals and disbursements, not shown separately,
 Includes Federal grants-in-aid to State and local governments. See Table B–82 for data on Federal grants-in-aid.

Table B-85. State and local government current receipts and expenditures, national income and product accounts (NIPA), 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

				Cu	rrent recei	pts				Current expenditures					
			Current ta									Govern-			Net
Year or quarter	Total	Total	Per- sonal current taxes	Taxes on produc- tion and imports	Taxes on corpo- rate income	Contri- butions for govern- ment social insur- ance	Income re- ceipts on assets	Current transfer re- ceipts <sup>1</sup>	Current surplus of govern- ment enter- prises	Total <sup>2</sup>	Con- sump- tion expen- ditures	ment social benefit pay- ments to per- sons	Interest pay- ments	Sub- si- dies	State and local govern- ment saving
1960	44.5 52.0 66.5 56.0 61.3 34.2 65.0 68.5 5.0 66.5 5.0 66.5 5.0 66.5 5.0 66.5 68.5 68.7 5.0 68.	37.0 39.7 42.8 445.8 49.8 59.8 58.8 8.9 51.1 126.3 136.0 117.7 115.6 64.0 2.20.0 337.3 363.7 221.2 20.0 337.3 363.7 579.8 488.0 422.1 2.0 672.1 79.7 44.9 45.8 488.0 604.7 449.9 45.8 488.0 151.1 16.1 16.1 16.1 16.1 16.1 16.1 16.	4.2 4.6 6.1 5.0 5.4 4.6 1.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6	31.5.3 33.8 33.7 41.8 33.7 41.8 34.5 33.8 38.7 31.5 52.8 38.7 41.8 32.8 32.8 32.8 32.8 32.8 32.8 32.8 32	1.2 1.3 1.5 1.7 1.8 2.0 2.2 2.6 3.3 3.6 3.6 3.3 5.3 5.3 6.0 6.7 7.3 9.6 11.4 12.1 13.6 14.0 15.9 22.2 22.7 23.6 24.2 22.7 23.6 24.2 22.5 24.6 24.9 30.0 31.7 33.0 34.1 35.8 36.0 31.7 35.8 36.0 31.7 35.8 36.0 36.0 36.0 36.0 36.0 36.0 36.0 36.0	3.5 5.5 6.6 6.7 7.8 8.8 8.9 9.9 1.0 11.1 1.1 2.2 1.3 3.4 3.9 3.6 6.0 7.7 2.2 8.8 4.0 4.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1.6 6.1 1.3 1.1 1.4 1.4 5.1 1.3 6.0 1.3 1.1 1.4 1.4 5.1 1.3 6.0 1.3 1.1 1.4 1.4 5.1 1.3 6.0 1.3 1.1 1.4 1.4 5.1 1.3 6.0 1.3 1.1 1.4 1.4 5.1 1.3 6.0 1.3 1.1 1.4 1.4 5.1 1.3 6.0 1.3 1.1 1.4 1.4 5.1 1.3 6.0 1.3 1.1 1.4 1.4 5.1 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1	1.3 1.4 1.5 1.6 1.1 1.5 1.6 1.1 1.5 1.6 1.1 1.5 1.6 1.1 1.5 1.6 1.1 1.5 1.6 1.1 1.5 1.6 1.1 1.7 1.7 1.1 1.1	4.5.5 5.2.5 6.4.4 7.3.3 8.0.0 11.1.1 25.2.2 34.0.0 39.3 39.3 39.3 39.3 39.3 39.3 39.3	1.2 1.3 1.4 1.6 1.6 1.7 1.6 1.5 1.5 1.5 1.5 1.4 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	40.2 43.8 46.8 46.8 46.8 46.8 46.8 46.8 46.8 46	33.5 36.6 6.6 3.0 4.19.9 45.8 45.0 45.0 45.0 45.0 45.0 45.0 45.0 45.0		2.1 2.2 2.4 2.7 2.9 3.4 3.4 4.2 4.4 5.3 6.5 7.5 8.5 9.6 11.1 12.5 17.2 19.4 22.8 27.1 33.7 40.2 48.4 53.2 46.2 48.4 53.2 46.3 66.5 7.2 8.5 66.8 67.3 70.6 67.3 70.6 83.5 70.6 83.5 70.6 83.5 83.5 83.6 83.6 83.7 70.6 83.7 83.7 83.7 83.7 83.7 83.7 83.7 83.7	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	4.3 4.3 5.2 5.7 6.4 6.5 7.8 7.0 7.5 8.0 7.5 15.6 15.7 13.0 8.8 7.6 -2.2 23.9 22.4 20.7 12.2 -5.8 -1.4 -2.2 23.0 36.3 46.9 25.0 36.3 41.8 41.3 -1.5 9.3 25.5 7.4 4.9 22.4 20.7 11.2 23.0 36.3 41.8 41.9 41.9 41.9 42.9 21.9 41.8 42.9 41.8 42.9 42.9 43.9 44.9 45.9 46.9 46.9 46.9 46.9 46.9 46.9 46.9 46
2009 P 2006: I III IV	1,800.6 1,830.3 1,842.5 1,845.3	1,336.3 1,230.0 1,249.5 1,253.8 1,262.9	271.2 298.4 305.5 300.4 305.5	931.6 871.9 883.8 891.8 902.2	59.6 60.2 61.6 55.1	21.9 23.1 22.1 21.3 20.6	97.9 101.9 105.5 108.7	597.5 449.9 457.8 463.5 455.5	-3.2 3 -1.1 -1.6 -2.3	2,015.1 1,738.0 1,767.0 1,800.1 1,809.4	1,430.9 1,254.5 1,274.6 1,292.7 1,307.6	475.9 392.2 399.4 412.6 407.4	106.8 91.0 92.6 94.5 94.0	1.4 .4 .4 .4	62.6 63.2 42.4 35.9
2007:            	1,902.3 1,923.4 1,932.1 1,951.6	1,296.8 1,309.1 1,315.7 1,331.9	322.7 324.1 323.1 321.3	920.4 930.4 936.8 948.7	53.8 54.7 55.8 61.9	20.0 19.7 19.6 19.9	112.0 114.0 115.3 115.3	477.0 484.5 485.6 488.4	-3.6 -4.0 -4.1 -3.9	1,869.5 1,888.4 1,911.7 1,952.9	1,331.2 1,357.3 1,373.6 1,402.5	439.5 422.6 430.2 442.4	97.0 97.8 99.2 100.8	1.9 10.7 8.8 7.2	32.8 34.9 20.3 -1.3
2008: I II IV	1,963.7 1,994.2 1,987.5 1,951.4	1,338.1 1,356.9 1,351.0 1,298.9	336.4 342.0 327.2 314.1	949.8 957.7 966.7 947.1	51.9 57.2 57.1 37.7	20.3 20.8 21.4 22.0	114.4 114.0 112.7 114.5	493.9 505.4 505.5 519.5	-3.1 -2.9 -3.1 -3.5	1,983.8 2,019.8 2,046.5 2,007.5	1,429.3 1,458.3 1,480.4 1,441.7	448.2 454.0 459.7 458.3	102.4 104.5 104.3 104.7	4.0 2.9 2.1 2.8	-20.1 -25.5 -59.0 -56.1
2009: I II IV <sup>p</sup>	1,961.4 1,989.3 2,003.6	1,272.2 1,238.1 1,263.5	287.0 252.7 275.2 269.8	933.0 928.0 929.7 935.6	52.2 57.4 58.6	21.8 21.7 21.9 22.1	115.8 115.7 116.2 116.4	555.7 617.4 604.9 612.1	-4.0 -3.5 -2.9 -2.3	1,998.0 2,013.9 2,018.6 2,029.8	1,424.4 1,429.9 1,429.8 1,439.7	465.7 477.5 480.0 480.5	106.0 105.4 107.5 108.5	2.0 1.2 1.2 1.2	-36.6 -24.6 -14.9

 $<sup>^{\</sup>rm I}$  Includes Federal grants-in-aid. See Table B–82 for data on Federal grants-in-aid.  $^{\rm I}$  Includes an item for the difference between wage accruals and disbursements, not shown separately.

TABLE B-86. State and local government revenues and expenditures, selected fiscal years, 1942-2007

[Millions of dollars]

			General	revenues by	source 2				General exp	oenditures b	y function <sup>2</sup>	
Fiscal year <sup>1</sup>	Total	Property taxes	Sales and gross receipts taxes	Individual income taxes	Corpora- tion net income taxes	Revenue from Federal Govern- ment	All other <sup>3</sup>	Total <sup>4</sup>	Edu- cation	High- ways	Public welfare <sup>4</sup>	All other <sup>4, 5</sup>
1942 1944 1946 1948 1950	10,418 10,908 12,356 17,250 20,911 25,181	4,537 4,604 4,986 6,126 7,349 8,652	2,351 2,289 2,986 4,442 5,154 6,357	276 342 422 543 788 998	272 451 447 592 593 846	858 954 855 1,861 2,486 2,566	2,123 2,269 2,661 3,685 4,541 5,763	9,190 8,863 11,028 17,684 22,787 26,098	2,586 2,793 3,356 5,379 7,177 8,318	1,490 1,200 1,672 3,036 3,803 4,650	1,225 1,133 1,409 2,099 2,940 2,788	3,889 3,737 4,591 7,170 8,867 10,342
1953 1954 1955 1955 1957 1958 1959 1960 1961 1962	27,307 29,012 31,073 34,667 38,164 41,219 45,306 50,505 54,037 58,252 62,890	9,375 9,967 10,735 11,749 12,864 14,047 14,983 16,405 18,002 19,054 20,089	6,927 7,276 7,643 8,691 9,829 10,437 11,849 12,463 13,494	1,065 1,127 1,237 1,538 1,754 1,759 1,994 2,463 2,613 3,037 3,269	817 778 744 890 984 1,018 1,001 1,180 1,266 1,308 1,505	2,870 2,966 3,131 3,335 3,843 4,865 6,377 6,974 7,131 7,871 8,722	6,252 6,897 7,584 8,465 9,252 9,699 10,516 11,634 12,563 13,489	27,910 30,701 33,724 36,711 40,375 44,851 48,887 51,876 56,201 60,206 64,816	9,390 10,557 11,907 13,220 14,134 15,919 17,283 18,719 20,574 22,216 23,776	4,987 5,527 6,452 6,953 7,816 8,567 9,592 9,428 9,844 10,357 11,136	2,914 3,060 3,168 3,139 3,485 3,818 4,136 4,404 4,720 5,084 5,481	10,619 11,557 12,197 13,399 14,940 16,547 17,876 19,325 21,063 22,549 24,423
1962–63 1963–64 1964–65 1965–66 1966–67 1967–68 1968–69 1969–70	62,269 68,443 74,000 83,036 91,197 101,264 114,550 130,756	19,833 21,241 22,583 24,670 26,047 27,747 30,673 34,054	14,446 15,762 17,118 19,085 20,530 22,911 26,519 30,322	3,267 3,791 4,090 4,760 5,825 7,308 8,908 10,812	1,505 1,695 1,929 2,038 2,227 2,518 3,180 3,738	8,663 10,002 11,029 13,214 15,370 17,181 19,153 21,857	14,556 15,951 17,250 19,269 21,198 23,599 26,117 29,973	63,977 69,302 74,678 82,843 93,350 102,411 116,728 131,332	23,729 26,286 28,563 33,287 37,919 41,158 47,238 52,718	11,150 11,664 12,221 12,770 13,932 14,481 15,417 16,427	5,420 5,766 6,315 6,757 8,218 9,857 12,110 14,679	23,678 25,586 27,579 30,029 33,281 36,915 41,963 47,508
1970–71 1971–72 1972–73 1973–74 1974–75 1975–76 1976–77 1977–78 1978–79	144,927 167,535 190,222 207,670 228,171 256,176 285,157 315,960 343,236 382,322	37,852 42,877 45,283 47,705 51,491 57,001 62,527 66,422 64,944 68,499	33,233 37,518 42,047 46,098 49,815 54,547 60,641 67,596 74,247 79,927	11,900 15,227 17,994 19,491 21,454 24,575 29,246 33,176 36,932 42,080	3,424 4,416 5,425 6,015 6,642 7,273 9,174 10,738 12,128 13,321	26,146 31,342 39,264 41,820 47,034 55,589 62,444 69,592 75,164 83,029	32,372 36,156 40,210 46,542 51,735 57,191 61,125 68,435 79,822 95,467	150,674 168,549 181,357 198,959 230,722 256,731 274,215 296,984 327,517 369,086	59,413 65,813 69,713 75,833 87,858 97,216 102,780 110,758 119,448 133,211	18,095 19,021 18,615 19,946 22,528 23,907 23,058 24,609 28,440 33,311	18,226 21,117 23,582 25,085 28,156 32,604 35,906 39,140 41,898 47,288	54,940 62,598 69,447 78,095 92,180 103,004 112,472 122,478 137,731 155,276
1980-81	423,404 457,654 486,753 542,730 598,121 641,486 686,860 726,762 786,129 849,502	74,969 82,067 89,105 96,457 103,757 111,709 121,203 132,212 142,400 155,613	85,971 93,613 100,247 114,097 126,376 135,005 144,091 156,452 166,336 177,885	46,426 50,738 55,129 64,529 70,361 74,365 83,935 88,350 97,806 105,640	14,143 15,028 14,258 17,141 19,152 19,994 22,425 23,663 25,926 23,566	90,294 87,282 90,007 96,935 106,158 113,099 114,857 117,602 125,824 136,802	111,599 128,925 138,008 153,571 172,317 187,314 200,350 208,482 227,838 249,996	407,449 436,733 466,516 505,008 553,899 605,623 657,134 704,921 762,360 834,818	145,784 154,282 163,876 176,108 192,686 210,819 226,619 242,683 263,898 288,148	34,603 34,520 36,655 39,419 44,989 49,368 52,355 55,621 58,105 61,057	54,105 57,996 60,906 66,414 71,479 75,868 82,650 89,090 97,879 110,518	172,957 189,935 205,080 223,068 244,745 269,568 295,510 317,527 342,479 375,094
1990-91 1991-92 1992-93 1993-94 1994-95 1995-96 1996-97 1997-98 1998-99 1999-2000	902,207 979,137 1,041,643 1,100,490 1,169,505 1,222,821 1,289,237 1,365,762 1,434,029 1,541,322	167,999 180,337 189,744 197,141 203,451 209,440 218,877 230,150 239,672 249,178	185,570 197,731 209,649 223,628 237,268 248,993 261,418 274,883 290,993 309,290	109,341 115,638 123,235 128,810 137,931 146,844 159,042 175,630 189,309 211,661	22,242 23,880 26,417 28,320 31,406 32,009 33,820 34,412 33,922 36,059	154,099 179,174 198,663 215,492 228,771 234,891 244,847 255,048 270,628 291,950	262,955 282,376 293,935 307,099 330,677 350,645 371,233 395,639 409,505 443,186	908,108 981,253 1,030,434 1,077,665 1,149,863 1,193,276 1,249,984 1,318,042 1,402,369 1,506,797	309,302 324,652 342,287 353,287 378,273 398,859 418,416 450,365 483,259 521,612	64,937 67,351 68,370 72,067 77,109 79,092 82,062 87,214 93,018 101,336	130,402 158,723 170,705 183,394 196,703 197,354 203,779 208,120 218,957 237,336	403,467 430,526 449,072 468,916 497,779 517,971 545,727 572,343 607,134 646,512
2000-01 2001-02 2002-03 2003-04 2004-05 2005-06 2006-07	1,647,161 1,684,879 1,763,212 1,887,397 2,026,034 2,189,750 2,329,015	263,689 279,191 296,683 317,941 335,779 358,564 383,101	320,217 324,123 337,787 361,027 384,266 417,013 438,580	226,334 202,832 199,407 215,215 242,273 268,362 289,308	35,296 28,152 31,369 33,716 43,256 53,075 60,524	324,033 360,546 389,264 423,112 438,558 452,854 467,584	477,592 490,035 508,702 536,386 581,902 639,882 689,918	1,626,066 1,736,866 1,821,917 1,908,543 2,012,110 2,122,967 2,265,284	563,575 594,694 621,335 655,182 688,314 728,922 776,626	107,235 115,295 117,696 117,215 126,350 136,495 144,807	261,622 285,464 310,783 340,523 365,286 371,997 389,123	693,634 741,413 772,102 795,622 832,161 885,552 954,729

<sup>&</sup>lt;sup>1</sup> Fiscal years not the same for all governments. See Note.

Data prior to 1952 are not available for intervening years.

Source: Department of Commerce (Bureau of the Census).

<sup>&</sup>lt;sup>2</sup> Excludes revenues or expenditures of publicly owned utilities and liquor stores and of insurance-trust activities. Intergovernmental receipts and payments between State and local governments are also excluded.

3 Includes motor vehicle license taxes, other taxes, and charges and miscellaneous revenues.

Includes motor vehicle license taxes, orner taxes, and cinargies and miscerianeous revenues.
Includes intergovernmental payments to the Federal Government.
Includes expenditures for libraries, hospitals, health, employment security administration, veterans' services, air transportation, water transport and terminals, parking facilities, transit subsidies, police protection, fire protection, protective inspection and regulation, sewerage, natural resources, parks and recreation, housing and community development, solid waste management, financial administration, judicial and legal, general public buildings, other government administration, interest on general debt, and other general expenditures, not elsewhere classified.

Note: Except for States listed, data for fiscal years listed from 1962–63 to 2006–07 are the aggregation of data for government fiscal years that ended in the 12-month period from July 1 to June 30 of those years; Texas used August and Alabama and Michigan used September as end dates. Data for 1963 and earlier years include data for government fiscal years ending during that particular calendar year.

TABLE B-87. U.S. Treasury securities outstanding by kind of obligation, 1970-2009 [Billions of dollars]

	Total Marketable Nonmarketable Treasury								ole				
End of year or month	secu- rities out- stand-	Total <sup>2</sup>	Treasury bills	Treasury notes	Treasury bonds	infla	Treasury ation-protei securities	cted	Total	U.S. savings secu-	Foreign series <sup>4</sup>	Govern- ment account	Other <sup>5</sup>
	ing 1					Total	Notes	Bonds		rities <sup>3</sup>		series	
Fiscal year: 1970 1971 1972 1973 1974 1975 1976 1977 1978 1978 1979	369.0 396.3 425.4 456.4 473.2 532.1 619.3 697.6 767.0 819.0	232.6 245.5 245.7 263.0 266.6 315.6 392.6 443.5 485.2 506.7	76.2 86.7 94.6 100.1 105.0 128.6 161.2 156.1 160.9	93.5 104.8 113.4 117.8 128.4 150.3 191.8 241.7 267.9 274.2	63.0 54.0 49.1 45.1 33.1 36.8 39.6 45.7 56.4 71.1				136.4 150.8 168.2 193.4 206.7 216.5 226.7 254.1 281.8 312.3	51.3 53.0 55.9 59.4 61.9 65.5 69.7 75.4 79.8 80.4	4.8 9.3 19.0 28.5 25.0 23.2 21.5 21.8 21.7 28.1	76.3 82.8 89.6 101.7 115.4 124.2 130.6 140.1 153.3 176.4	4.1 5.8 3.7 3.7 4.3 3.6 4.9 16.8 27.1 27.4
1980	906.4 996.5 1,140.9 1,375.8 1,559.6 1,821.0 2,122.7 2,347.8 2,599.9 2,836.3	594.5 683.2 824.4 1,024.0 1,176.6 1,360.2 1,564.3 1,676.0 1,802.9 1,892.8	199.8 223.4 277.9 340.7 356.8 384.2 410.7 378.3 398.5 406.6	310.9 363.6 442.9 557.5 661.7 776.4 896.9 1,005.1 1,089.6 1,133.2	83.8 96.2 103.6 125.7 158.1 199.5 241.7 277.6 299.9 338.0				311.9 313.3 316.5 351.8 383.0 460.8 558.4 671.8 797.0 943.5	72.7 68.0 67.3 70.0 72.8 77.0 85.6 97.0 106.2 114.0	25.2 20.5 14.6 11.5 8.8 6.6 4.1 4.4 6.3 6.8	189.8 201.1 210.5 234.7 259.5 313.9 365.9 440.7 536.5 663.7	24.2 23.7 24.1 35.6 41.8 63.3 102.8 129.8 148.0 159.0
1990	3,210.9 3,662.8 4,061.8 4,408.6 4,689.5 4,950.6 5,220.8 5,407.5 5,518.7 5,647.2	2,092.8 2,390.7 2,677.5 2,904.9 3,091.6 3,260.4 3,418.4 3,439.6 3,331.0 3,233.0	482.5 564.6 634.3 658.4 697.3 742.5 761.2 701.9 637.6 653.2	1,218.1 1,387.7 1,566.3 1,734.2 1,867.5 1,980.3 2,098.7 2,122.2 2,009.1 1,828.8	377.2 423.4 461.8 497.4 511.8 522.6 543.5 576.2 610.4 643.7	24.4 58.8 92.4	24.4 41.9 67.6	17.0	1,118.2 1,272.1 1,384.3 1,503.7 1,597.9 1,690.2 1,802.4 1,967.9 2,187.7 2,414.2	122.2 133.5 148.3 167.0 176.4 181.2 184.1 182.7 180.8 180.0	36.0 41.6 37.0 42.5 42.0 41.0 37.5 34.9 35.1	779.4 908.4 1,011.0 1,114.3 1,211.7 1,324.3 1,454.7 1,608.5 1,777.3 2,005.2	180.6 188.5 188.0 179.9 167.8 143.8 126.1 141.9 194.4
2000	5,622.1 5,807.5 6,228.2 6,783.2 7,379.1 7,932.7 8,507.0 9,007.7 10,024.7 11,909.8	2,992.8 2,930.7 3,136.7 3,460.7 3,846.1 4,084.9 4,303.0 4,448.1 5,236.0 7,009.7	616.2 734.9 868.3 918.2 961.5 914.3 911.5 958.1 1,489.8 1,992.5	1,611.3 1,433.0 1,521.6 1,799.5 2,109.6 2,328.8 2,447.2 2,458.0 2,624.8 3,773.8	635.3 613.0 593.0 576.9 552.0 520.7 534.7 561.1 582.9 679.8	115.0 134.9 138.9 166.1 223.0 307.1 395.6 456.9 524.5 551.7	81.6 95.1 93.7 120.0	33.4 39.7 45.1 46.1	2,629.3 2,876.7 3,091.5 3,322.5 3,533.0 3,847.8 4,203.9 4,559.5 4,788.7 4,900.1	177.7 186.5 193.3 201.6 204.2 203.6 203.7 197.1 194.3 192.5	25.4 18.3 12.5 11.0 5.9 3.1 3.0 3.0 4.9	2,242.9 2,492.1 2,707.3 2,912.2 3,130.0 3,380.6 3,722.7 4,026.8 4,297.7 4,454.3	183.3 179.9 178.4 197.7 192.9 260.5 274.5 332.6 293.8 248.4
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	9,238.0 9,358.1 9,437.6 9,377.6 9,388.8 9,492.0 9,585.5 10,024.7 10,574.1 10,661.2 10,699.8	4,532.9 4,661.4 4,732.4 4,642.6 4,685.2 4,696.4 4,822.1 4,901.9 5,236.0 5,729.4 5,822.7 5,797.6	984.4 1,125.4 1,158.4 1,025.7 1,119.2 1,060.5 1,135.8 1,227.2 1,489.8 1,909.7 2,003.7 1,866.7	2,503.9 2,478.4 2,514.1 2,540.7 2,476.6 2,543.4 2,574.8 2,556.4 2,624.8 2,686.6 2,674.9 2,792.2	558.5 571.8 571.8 571.8 581.1 581.1 582.9 582.9 582.9 594.6 594.6	472.0 471.8 474.1 490.3 494.3 497.5 516.5 521.4 524.5 536.2 535.4 530.1			4,705.1 4,696.7 4,705.2 4,735.0 4,703.6 4,795.6 4,763.4 4,743.9 4,788.7 4,844.7 4,838.5 4,902.2	195.7 195.6 195.4 195.3 195.2 195.0 194.8 194.5 194.3 194.2 194.2	5.9 5.3 4.9 4.9 3.3 3.1 3.0 3.0 4.0 4.0	4,181.7 4,175.6 4,183.7 4,213.6 4,190.8 4,288.1 4,266.0 4,250.9 4,297.7 4,358.4 4,353.7 4,421.7	321.8 320.2 321.2 321.1 314.3 309.4 299.6 295.6 293.8 288.1 286.6 282.4
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	10,632.1 10,877.1 11,126.9 11,238.6 11,321.6 11,545.3 11,669.3 11,812.9 11,909.8 11,893.1 12,113.0 12,311.4	5,749.9 6,012.4 6,266.1 6,363.4 6,454.3 6,612.1 6,782.8 6,939.2 7,009.7 6,947.6 7,174.6 7,272.5	1,798.6 1,985.6 2,033.6 1,994.5 2,065.4 2,006.5 2,020.5 2,068.5 1,992.5 1,858.5 1,850.5	2,826.0 2,892.0 3,084.9 3,204.5 3,211.3 3,417.7 3,547.5 3,638.6 3,773.8 4,039.8 4,181.1	594.6 609.4 620.5 620.5 632.5 643.7 654.8 667.8 679.8 691.9 704.9 717.9	516.7 511.5 513.1 529.9 531.0 532.3 548.0 552.4 551.7 567.1 567.5 568.1			4,882.2 4,864.8 4,860.8 4,875.2 4,867.3 4,933.2 4,886.5 4,873.6 4,900.1 4,945.5 5,038.9	193.8 194.1 194.0 194.0 193.9 193.6 193.3 192.8 192.5 192.2 191.3	5.0 5.0 6.0 7.0 6.5 6.0 5.5 4.9 4.4 4.4	4,406.0 4,391.4 4,388.7 4,403.9 4,399.4 4,468.6 4,431.8 4,425.9 4,454.3 4,501.1 4,497.4 4,597.1	277.3 274.3 272.2 270.3 267.6 265.0 256.0 250.4 248.4 247.8 244.9 246.0

Data beginning with January 2001 are interest-bearing and non-interest-bearing securities; prior data are interest-bearing securities only.
Data from 1986 to 2002 and 2005 to 2009 include Federal Financing Bank securities, not shown separately.

Source: Department of the Treasury.

<sup>&</sup>lt;sup>3</sup> Through 1996, series is U.S. savings bonds. Beginning 1997, includes U.S. retirement plan bonds, U.S. individual retirement bonds, and U.S. savings notes previously included in "other" nonmarketable securities.

<sup>4</sup> Nonmarketable certificates of indebtedness, notes, bonds, and bills in the Treasury foreign series of dollar-denominated and foreign-currency-denominated

issues.

5 Includes depository bonds; retirement plan bonds; Rural Electrification Administration bonds; State and local bonds; special issues held only by U.S. Government agencies and trust funds and the Federal home loan banks; for the period July 2003 through February 2004, depositary compensation securities; and beginning August 2008, Hope bonds for the HOPE For Homeowners Program.

Note: Through fiscal year 1976, the fiscal year was on a July 1-June 30 basis; beginning with October 1976 (fiscal year 1977), the fiscal year is on an October 1-September 30 basis.

 $\begin{array}{c} \text{Table B-88. Maturity distribution and average length of marketable interest-bearing public debt securities held by private investors, 1970–2009} \\ \end{array}$ 

	Amount		- 0 / P11 ( a.	Maturity class				
End of year or month	outstanding, privately held	Within 1 year	1 to 5 years	5 to 10 years	10 to 20 years	20 years and over	Average	length <sup>1</sup>
			Millions	of dollars			Years	Months
Fiscal year: 1970 1971 1971 1972 1973 1974 1975 1976 1977 1978 1979	157,910 161,863 165,978 167,869 164,862 210,382 279,782 326,674 356,501 380,530	76,443 74,803 79,509 84,041 87,150 115,677 150,29 161,329 163,819 181,883	57,035 58,557 57,157 54,139 50,103 65,852 90,578 113,319 132,993 127,574	8,286 14,503 16,033 16,385 14,197 15,385 24,169 33,067 33,500 32,279	7,876 6,357 6,358 8,741 9,930 8,857 8,087 8,428 11,383 18,489	8,272 7,645 6,922 4,564 3,481 4,611 6,652 10,531 14,805 20,304	3 3 3 2 2 2 2 2 2 3 3	8 6 3 1 11 8 7 11 3
1980 1981 1982 1983 1983 1984 1985 1986 1987 1987	463,717 549,863 682,043 862,631 1,017,488 1,185,675 1,354,275 1,445,366 1,555,208 1,654,660	220,084 256,187 314,436 379,579 437,941 472,661 506,903 483,582 524,201 546,751	156,244 182,237 221,783 294,955 332,808 402,766 467,348 526,746 552,993 578,333	38,809 48,743 75,749 99,174 130,417 159,383 189,995 209,160 232,453 247,428	25,901 32,569 33,017 40,826 49,664 62,853 70,664 72,862 74,186 80,616	22,679 30,127 37,058 48,097 66,658 88,012 119,365 153,016 171,375 201,532	3 4 4 4 5 5 5 6	9 0 11 1 6 11 3 9 9
1990 1991 1992 1993 1994 1995 1996 1997 1998	1,841,903 2,113,799 2,363,802 2,562,336 2,719,861 2,870,781 3,011,185 2,998,846 2,856,637 2,728,011	626,297 713,778 808,705 858,135 877,932 1,002,875 1,058,558 1,017,913 940,572 915,145	630,144 761,243 866,329 978,714 1,128,322 1,157,492 1,212,258 1,206,993 1,105,175 962,644	267,573 280,574 295,221 306,663 289,998 290,111 306,643 321,622 319,331 378,163	82,713 84,900 84,706 94,345 88,208 87,297 111,360 154,205 157,347 149,703	235,176 273,304 308,141 324,479 335,401 333,006 322,366 298,113 334,212 322,356	0 61 61 61 61 61 61 61 61 61	1 0 11 10 8 4 3 5 10
2000 2001 2002 2003 2004 2005 2006 2007 2008	2,469,152 2,328,302 2,492,821 2,804,092 3,145,244 3,334,411 3,496,359 3,634,666 4,745,256 6,228,565	858,903 900,178 939,986 1,057,049 1,127,850 1,100,783 1,140,553 1,176,510 2,042,003 2,604,676	791,540 650,522 802,032 955,239 1,150,979 1,279,646 1,295,589 1,309,871 1,468,455 2,074,723	355,382 329,247 311,176 351,552 414,728 499,366 589,748 677,905 719,347 994,689	167,082 174,653 203,816 243,755 243,036 281,229 290,733 291,963 352,430 350,550	296,246 273,702 235,811 196,497 208,652 173,367 179,736 178,417 163,022 203,928	66655444444444444444444444444444444444	2 1 6 1 11 10 11 10 1 10 1
2008: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec Dec Mar Apr Move Move Move Move Move Move Move Move	3,805,408 3,933,939 4,127,033 4,079,776 4,162,323 4,203,441 4,328,809 4,386,440 4,745,256 5,238,827 5,312,125 5,307,633	1,315,046 1,454,105 1,607,155 1,509,658 1,618,739 1,580,568 1,668,784 1,774,790 2,042,003 2,462,352 2,540,826 2,406,537	1,295,456 1,294,886 1,323,534 1,366,837 1,329,756 1,396,177 1,439,791 1,390,479 1,468,455 1,496,698 1,490,667	710,580 691,672 702,527 709,124 718,171 730,327 716,694 706,395 719,347 764,782 761,948 776,147	319,185 319,156 319,481 338,330 333,602 334,145 341,086 351,906 352,430 352,076 355,148	165,140 174,120 174,336 155,827 162,056 162,224 162,453 162,870 163,022 162,919 163,536 163,536	4 4 4 4 4 4 4 3 3 3 3	9 8 5 6 6 6 5 5 1 10 10
2009: Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec	5,240,470 5,505,532 5,759,709 5,800,248 5,815,094 5,943,636 6,065,512 6,179,984 6,228,565 6,138,150 6,386,026 6,483,901	2,336,988 2,543,867 2,601,162 2,601,043 2,660,151 2,611,596 2,636,005 2,669,428 2,604,676 2,481,258 2,462,190 2,415,461	1,606,792 1,659,368 1,790,274 1,792,321 1,762,962 1,891,559 1,964,000 2,014,501 2,074,723 2,073,374 2,259,073 2,337,392	773,548 776,956 833,981 875,653 856,289 900,239 916,972 951,363 994,689 1,019,112 1,084,264 1,137,420	360,402 358,570 357,716 367,080 361,806 360,698 352,756 350,550 349,067 349,156	162,741 166,771 176,575 155,227 168,611 178,436 187,837 191,935 203,928 215,339 231,343 244,348	33 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	11 11 11 11 11 11 0 0 1 3 3

<sup>&</sup>lt;sup>1</sup> Treasury inflation-protected securities—notes, first offered in 1997, and bonds, first offered in 1998—are included in the average length calculation from 1997 forward.

Data shown in this table are as of January 14, 2010.

Source: Department of the Treasury.

Note: Through fiscal year 1976, the fiscal year was on a July 1–June 30 basis; beginning with October 1976 (fiscal year 1977), the fiscal year is on an October 1–September 30 basis.

TABLE B-89. Estimated ownership of U.S. Treasury securities, 2000-2009

[Billions of dollars]

		1			Dillions	n donaroj						
		Federal				l	Held by priv	ate investo	rs			
End of month	Total public	Reserve and Intragov-	Total	De-	U.S.	Pensio	n funds State	Insur-		State and	Foreign	Other
	debt <sup>1</sup>	ernmen- tal hold- ings <sup>2</sup>	privately held	pository institu- tions <sup>3</sup>	savings bonds <sup>4</sup>	Private <sup>5</sup>	and local govern- ments	ance compa- nies	Mutual funds <sup>6</sup>	local govern- ments	and inter- national <sup>7</sup>	inves- tors <sup>8</sup>
2000: Mar	5,685.9 5,674.2	2,590.6 2,698.6 2,737.9 2,781.8	3,182.8 2,987.3 2,936.3 2,880.4	237.7 222.2 220.5 201.5	185.3 184.6 184.3 184.8	150.2 149.0 147.9 145.0	196.9 194.9 185.5 179.1	120.0 116.5 113.7 110.2	222.3 205.4 207.8 225.7	306.3 309.3 307.9 310.0	1,085.0 1,060.7 1,038.8 1,015.2	679.1 544.8 529.9 509.0
2001: Mar June Sept Dec	5,726.8 5,807.5	2,880.9 3,004.2 3,027.8 3,123.9	2,892.8 2,722.6 2,779.7 2,819.5	188.0 188.1 189.1 181.5	184.8 185.5 186.4 190.3	153.4 148.5 149.9 145.8	177.3 183.1 166.8 155.1	109.1 108.1 106.8 105.7	225.3 221.0 234.1 261.9	316.9 324.8 321.2 328.4	1,012.5 983.3 992.2 1,040.1	525.5 380.3 433.1 410.7
2002: Mar June Sept Dec	6,126.5 6,228.2 6,405.7	3,156.8 3,276.7 3,303.5 3,387.2	2,849.2 2,849.8 2,924.8 3,018.5	187.6 204.7 209.3 222.6	191.9 192.7 193.3 194.9	152.7 152.1 154.5 153.8	163.3 153.9 156.3 158.9	114.0 122.0 130.4 139.7	266.1 253.8 256.8 281.0	327.6 333.6 338.6 354.7	1,057.2 1,123.1 1,188.6 1,235.6	388.8 313.8 297.0 277.4
2003: Mar June Sept Dec	6,670.1 6,783.2 6,998.0	3,390.8 3,505.4 3,515.3 3,620.1	3,069.9 3,164.7 3,268.0 3,377.9	153.4 145.1 146.8 153.1	196.9 199.1 201.5 203.8	165.8 170.2 167.7 172.1	162.1 161.3 155.5 148.6	139.5 138.7 137.4 136.5	296.6 302.3 287.1 280.8	350.0 347.9 357.7 364.2	1,275.2 1,371.9 1,443.3 1,523.1	330.4 328.2 371.1 395.6
2004: Mar June Sept Dec	7,274.3 7,379.1 7,596.1	3,628.3 3,742.8 3,772.0 3,905.6	3,502.8 3,531.5 3,607.0 3,690.6	162.8 158.6 138.5 125.0	204.4 204.6 204.1 204.4	169.8 173.3 174.0 173.7	143.6 134.9 140.8 151.0	141.0 144.1 147.4 149.7	280.8 258.7 255.0 254.1	374.1 381.2 381.7 389.1	1,670.0 1,735.4 1,794.5 1,849.3	356.3 340.6 371.0 394.3
2005: Mar June Sept Dec	7,836.5 7,932.7 8,170.4	3,921.6 4,033.5 4,067.8 4,199.8	3,855.4 3,803.0 3,864.9 3,970.6	141.8 126.9 125.3 117.1	204.2 204.2 203.6 205.1	177.3 181.0 184.2 184.9	158.0 171.3 164.8 153.8	152.4 155.0 159.0 160.4	261.1 248.7 244.7 251.3	412.0 444.0 467.6 481.4	1,952.2 1,877.5 1,929.6 2,033.9	396.4 394.5 386.0 382.6
2006: Mar June Sept Dec	8,420.0 8,507.0	4,257.2 4,389.2 4,432.8 4,558.1	4,114.0 4,030.8 4,074.2 4,122.1	115.3 117.1 113.5 114.8	205.9 205.2 203.6 202.4	186.7 192.1 201.9 207.5	153.0 150.9 155.6 157.1	161.3 161.2 160.6 159.0	248.7 244.2 235.7 250.7	486.1 499.4 502.1 516.9	2,082.1 1,977.8 2,025.3 2,103.1	475.0 482.8 475.8 410.6
2007: Mar June Sept Dec	8,867.7 9,007.7	4,576.6 4,715.1 4,738.0 4,833.5	4,273.1 4,152.6 4,269.7 4,395.7	119.7 110.4 119.6 129.7	200.3 198.6 197.1 196.4	221.7 232.5 246.7 257.6	159.2 160.2 165.6 168.8	150.8 142.1 133.4 123.3	264.5 267.7 306.3 362.9	535.0 580.3 541.4 531.5	2,194.8 2,192.0 2,235.3 2,353.2	427.1 268.7 324.1 272.2
2008: Mar June Sept Dec	9,492.0 10,024.7	4,694.7 4,685.8 4,692.7 4,806.4	4,742.9 4,806.2 5,332.0 5,893.4	125.3 112.7 130.0 105.0	195.3 194.9 194.2 194.0	270.5 276.7 292.5 297.2	169.4 169.1 171.6 174.6	129.4 135.5 140.6 160.5	484.4 477.2 656.1 768.8	521.6 513.4 499.3 483.1	2,505.8 2,587.2 2,799.5 3,075.9	341.2 339.4 448.3 634.4
2009: Mar June Sept Dec	11,545.3	4,785.2 5,026.8 5,127.1 5,276.9	6,341.7 6,518.5 6,782.7 7,034.5	129.1 140.8 199.0	193.9 193.5 192.4 191.3	305.9 312.4 324.5	173.2 172.7 176.7	179.7 189.7 196.3	716.0 695.0 643.0	477.9 488.4 502.5	3,264.6 3,382.1 3,497.4	901.4 943.8 1,050.9

Note: Data shown in this table are as of January 25, 2010.

Source: Department of the Treasury.

<sup>&</sup>lt;sup>2</sup> Federal Reserve holdings exclude Treasury securities held under repurchase agreements.

<sup>&</sup>lt;sup>3</sup> Includes commercial banks, savings institutions, and credit unions.

<sup>&</sup>lt;sup>4</sup> Current accrual value.

<sup>&</sup>lt;sup>5</sup> Includes Treasury securities held by the Federal Employees Retirement System Thrift Savings Plan "G Fund."

<sup>6</sup> Includes money market mutual funds, mutual funds, and closed-end investment companies.

7 Includes nonmarketable foreign series, Treasury securities, and Treasury deposit funds. Excludes Treasury securities held under repurchase agreements in custody accounts at the Federal Reserve Bank of New York. Estimates reflect benchmarks to this series at differing intervals; for further detail, see *Treasury Multiple Market Applied Series* 2 the Property of the Pro

Bulletin and http://www.treas.gov/tic/ficsec2.shtml

8 Includes individuals, Government-sponsored enterprises, brokers and dealers, bank personal trusts and estates, corporate and noncorporate businesses, and other investors.

# CORPORATE PROFITS AND FINANCE

# $\begin{array}{c} \text{Table B-90. Corporate profits with inventory valuation and capital consumption} \\ \text{adjustments, } 1960-2009 \end{array}$

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Corporate profits			ofits after tax with invent apital consumption adjus	
Year or quarter	with inventory valuation and capital consumption adjustments	Taxes on corporate income	Total	Net dividends	Undistributed profits with inventory valuation and capital consumption adjustments
1960 1961 1962 1963 1964 1965 1966 1966 1966 1969 1969 1970 1971 1972 1973 1974 1977 1978 1978 1978 1978 1979 1980 1981 1982 1983 1984 1985 1986 1989 1990 1991 1991 1992 1993 1994 1995 1996 1997 1997 1998 1999 1999 1999 1999 1999	54.2 68.3 75.5 86.5 92.5 90.2 97.3 94.5 82.5 96.1 111.4 124.5 115.1 133.3 16.6 191.8 225.4 201.4 225.4 201.4 225.3 337.8 426.6 425.6	22.8 22.9 24.1 26.4 28.2 31.1 33.9 39.6 40.0 52.8 51.6 65.3 74.4 84.9 90.0 87.5 80.6 97.5 99.4 109.7 130.4 141.6 145.1 145.4 138.6 148.7 171.7 171.0 183.1 1217.8 245.8	30.3 31.3 38.3 38.3 38.3 42.0 47.4 55.5 58.7 57.3 57.6 54.5 47.7 57.9 69.1 74.5 62.3 81.7 96.3 117.4 133.6 135.3 114.2 138.9 139.2 221.1 233.1 204.5 237.4 285.0 279.5 289.0 318.7 347.5 372.7 3	13.4 13.9 15.0 16.2 20.2 20.7 21.5 23.5 24.2 24.3 25.0 26.8 29.9 33.2 33.0 44.8 57.5 64.1 77.7 83.5 90.8 97.6 106.2 112.3 129.9 158.0 169.1 180.0 202.9 235.7 257.	16.9 17.4 23.2 25.7 29.2 35.3 38.0 35.8 35.8 34.1 30.3 23.4 42.2 44.6 29.1 48.7 57.3 72.6 82.8 77.8 50.2 61.5 95.7 130.3 135.6 98.3 125.1 121.5 120.0 159.5 169.7 199.4 243.9 272.3 308.2 212.6 260.1 176.3 210.0 280.6 309.2 212.6 260.1
2007 2008 2009 P 2006: I	. 1,360.4 . 1,590.9 . 1,597.7 . 1,655.1	451.5 292.2 460.7 475.1 496.6	1,090.2 1,068.2 1,130.2 1,122.6 1,158.5	767.8 689.9 576.1 646.4 691.1 727.1	322.4 378.3 483.9 431.5 431.4
2007: I	. 1,589.6 1,535.4 1,594.9 1,537.1 1,499.4	460.7 469.5 466.5 440.0 430.1	1,128.8 1,065.9 1,128.4 1,097.1 1,069.3	754.5 772.6 778.1 770.6 749.9	374.3 293.3 350.3 326.5 319.4
2008:	1,459.7 1,403.7 1,454.6 1,123.6	323.2 317.5 304.8 223.3	1,136.4 1,086.3 1,149.8 900.4	719.4 693.7 676.6 669.9	417.1 392.6 473.2 230.5
2009: I	1,226.5 1,358.9	270.3 305.9 321.0	912.4 920.6 1,037.9	618.1 556.0 549.9 580.5	294.2 364.5 488.0

Table B-91. Corporate profits by industry, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

			Corporat	e profits w	ith invent	ory valuati	on adjustr	nent and	without ca	pital cons	umption a	djustment		
		Domestic industries												
Year or quarter				Financial					Nonfir	nancial				Rest of
	Total	Total	Total	Federal Reserve banks	Other	Total	Manu- factur- ing <sup>1</sup>	Trans- porta- tion <sup>2</sup>	Utilities	Whole- sale trade	Retail trade	Infor- mation	Other	the world
SIC: 3 1960 1961 1962 1963 1964 1965 1968 1969 1969 1970 1971 1977 1977 1978 1978 1979 1980 1988 1989 1989 1999	51.5 51.8 57.0 62.1 68.6 82.0 88.8 85.5 74.4 88.3 101.6 115.4 109.6 135.0 165.6 194.8 222.4 232.0 211.4 219.1 191.1 226.6 264.6 257.5 253.0 306.9 306.9 374.1 388.8 430.3 471.6	48.3 48.5 53.3 58.1 64.1 77.2 83.2 78.9 67.3 80.4 92.1 100.5 92.1 120.4 149.1 175.9 189.4 175.9 189.4 189.5 228.1 219.4 213.5 258.8 310.8 310.8 310.8 310.8 310.8 310.8	8.4.4 8.3.8.6.6 8.3.3 10.7.7 11.2.1 12.8.6 13.6.6 15.4.4 17.6.6 20.2.2 20.2.2 25.0 39.5,5 30.4.4 45.9 92.3 34.5 45.9 92.3 132.1 122.1 122.1 122.1 122.1 122.1 122.1 122.1 123.1 123.1 123.1 123.1 123.1 124.1 125.1 126.	0.9 0.9 9.9 1.0 1.1 1.3 1.7 2.0 2.5 3.1 3.5 3.3 3.5 5.7 5.6 5.9 6.1 7.6 6.1 11.8 14.4 16.3 15.5 16.2 14.6 16.3 15.2 14.6 16.3 15.2 16.3 17.7 17.8 18.1 1	7.5 7.6 7.7 7.3 7.6 8.0 9.1 19.2 10.3 10.5 11.9 9.2 12.0 12.5 8.3 31.9 22.2 2.14.7 2.5 41.2 2.5 41.2 45.3 50.7 70.5 101.4 124.4	39.9 40.2 44.7 49.8 55.4 66.9 69.3 66.3 66.3 70.9 80.0 71.9 100.2 124.1 143.8 160.0 157.0 142.0 160.3 132.5 156.8 197.3 242.0 226.8 230.4 231.7 225.8	23.8 23.8 26.3 29.7 7.2 47.2 41.9 20.5 27.1 21.2 112.1 114.4 99.4 99.5 23.8 23.8 23.8 27.5 22.5 27.2 27.2 27.2 27.2 27.2 27.2	7.5.7.9 8.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9		2.5 2.5 2.8 2.8 3.4 3.8 4.0 4.1 4.6 4.9 4.9 4.2 6.9 8.2 11.5 13.8 12.9 15.6 15.6 15.6 11.5 22.4 19.6 21.0 29.5 23.9 24.1 19.0 20.4 22.1 19.6 22.2 22.2	28 8 300 34 4 3 4 4 9 4 9 9 5 7 6 4 4 6 4 6 7 2 2 10 5 5 2 4 12 3 9 9 9 13 5 5 2 4 10 2 2 1 2 1 6 6 7 2 2 7 7 2 9 2 2 4 0 6		3.3 3.4 3.6 4.7 5.4 5.9 6.1 5.8 6.1 5.8 6.1 7.0 8.8 19.8 21.8 12.0 21.8 19.3 10.4 11.1 9.2 21.5 24.4 29.3 26.7 30.1 28.4 21.4 21.4 21.5 21.4 21.5 21.6 21.6 21.6 21.6 21.6 21.6 21.6 21.6	3.1 3.3 4.1 4.5 4.7 4.5 4.8 5.6 6.6 6.6 7.1 7.9 14.9 11.5 14.9 34.6 35.5 29.7 32.6 35.1 38.6 38.1 39.5 48.0 67.1 76.1 76.5 77.1 76.5 77.1
1993 1994 1995 1996 1997 1998 1999 2000 <i>NAICS:</i> <sup>3</sup>	515.0 586.6 666.0 743.8 815.9 738.6 776.6 755.7	438.1 508.6 573.1 641.8 708.3 635.9 655.0 610.0	133.4 129.2 160.1 167.5 187.4 159.6 190.4	16.7 18.5 22.9 22.5 24.3 25.6 26.7 31.2	116.7 110.7 137.2 144.9 163.2 134.0 163.8 163.2	304.7 379.5 413.0 474.4 520.9 476.2 464.6 415.7	116.8 150.1 176.7 192.0 212.2 173.4 174.6 166.5	70.2 85.2 87.9 93.7 86.5 81.1 59.1 45.8		26.7 31.8 28.0 40.6 48.2 51.7 51.7 55.6	40.6 47.2 44.8 53.7 65.9 74.7 75.6 71.4		50.4 65.2 75.5 94.5 108.1 95.5 103.6 76.4	76.9 78.0 92.9 102.0 107.6 102.8 121.5 145.6
1998	738.6 776.6 755.7 720.8 762.8 892.2 1,195.1 1,609.5 1,784.7 1,730.4 1,424.5 1,705.4	635.9 655.0 610.0 551.1 604.9 726.4 990.1 1,370.0 1,527.8 1,382.6 1,047.3 1,423.2 1,467.9	159.5 189.3 189.6 228.0 265.2 311.8 362.3 443.6 448.0 367.8 278.9 384.2 406.2	25.6 26.7 31.2 28.9 23.5 20.1 20.0 26.6 33.8 37.7 35.7 38.2 38.5	133.9 162.6 158.4 199.1 241.7 291.8 342.3 417.0 414.1 330.1 243.2 346.0 367.7	476.4 465.7 420.4 323.1 339.7 414.6 627.8 926.4 1,079.9 1,014.9 768.4 1,039.0 1,061.7	155.8 148.8 143.9 49.7 69.4 154.1 247.2 304.5 278.6 175.5 288.9 316.0	21.3 16.5 15.2 1.2 1 7.4 14.4 29.0 42.1 30.0 11.4 32.9 33.0	33.5 33.7 25.6 25.2 12.3 12.4 19.4 29.8 54.4 49.1 40.1 51.3	52.8 54.8 58.7 51.3 49.1 54.8 75.6 92.2 103.7 102.2 75.1 107.9	67.3 65.7 60.7 72.6 81.6 88.9 93.4 122.6 133.2 121.6 78.2 127.9	21.9 12.5 -15.5 -24.4 -3.8 4.9 45.6 81.3 92.4 90.3 84.7 90.5 77.5	123.7 133.6 131.8 147.4 153.0 176.7 225.2 324.3 349.6 343.0 303.4 339.6 334.4	102.8 121.5 145.6 169.7 157.9 165.8 205.0 239.4 256.8 347.8 377.2 282.2 311.2
2008:	1,779.1 1,732.9 1,704.1 1,512.9 1,463.8 1,522.2 1,199.3 1,327.6 1,355.1 1,477.8	1,467.9 1,362.4 1,277.0 1,100.6 1,096.8 1,125.0 866.9 1,011.9 1,053.9 1,154.6	378.2 302.5 357.0 330.8 297.5 130.3 253.9 280.7 362.4	37.5 36.5 35.9 31.1 34.6 41.1 28.8 46.1 57.6	340.6 266.0 321.1 299.7 262.9 89.2 225.1 234.6 304.8	984.2 974.5 743.6 766.0 827.5 736.6 758.0 773.3 792.2	244.0 265.7 187.6 160.1 205.7 148.6 121.6 132.3 129.7	30.9 23.4 12.9 11.9 9.2 11.5 6.7 1.3 4.8	47.3 51.2 33.1 43.1 43.5 40.8 53.6 53.4 61.5	107.9 76.0 46.6 56.6 85.8 111.5 94.0 87.5 80.6	137.2 118.7 102.4 75.6 80.2 77.1 79.7 83.1 95.1 98.8	93.9 99.4 91.6 101.8 81.9 63.6 95.4 99.4 107.0	334.4 341.5 356.4 296.3 312.1 324.4 280.8 303.6 304.2 309.9	370.5 427.1 412.3 367.0 397.2 332.4 315.8 301.2 323.2

Note: Industry data on SIC basis and NAICS basis are not necessarily the same and are not strictly comparable.

See Table B–92 for industry detail.
 Data on Standard Industrial Classification (SIC) basis include transportation and public utilities. Those on North American Industry Classification System (NAICS) basis include transporation and warehousing. Utilities classified separately in NAICS (as shown beginning 1998).
 SIC-based industry data use the 1987 SIC for data beginning in 1987 and the 1972 SIC for prior data. NAICS-based data use 2002 NAICS.

TABLE B-92. Corporate profits of manufacturing industries, 1960-2009

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

	Corporate profits with inventory valuation adjustment and without capital consumption adjustment  Durable goods <sup>2</sup> Nondurable goods <sup>2</sup> Nondurable goods <sup>2</sup>												
				Du	urable good	s 2				Non	idurable go	ods <sup>2</sup>	
Year or quarter	Total manu- factur- ing	Total <sup>1</sup>	Fabri- cated metal products	Ma- chinery	Computer and electronic products	Electrical equipment, appliances, and components	Motor vehi- cles, bodies and trailers, and parts	Other	Total	Food and bever- age and tobacco products	Chem- ical products	Petro- leum and coal products	Other
SIC: 3 1960	23.8 23.4 26.3 29.7 32.6 39.8 42.6 39.2 41.9 37.3	11.6 11.3 14.1 16.4 18.1 23.3 24.1 21.3 22.5 19.2	0.8 1.0 1.2 1.3 1.5 2.1 2.4 2.5 2.3 2.0	1.8 1.9 2.4 2.6 3.3 4.0 4.6 4.2 4.2 3.8		1.3 1.5 1.6 1.7 2.7 3.0 3.0 2.9 2.3	3.0 2.5 4.0 4.9 4.6 6.2 4.0 5.5 4.8	2.7 2.9 3.4 4.0 4.4 5.2 5.2 4.9 5.6 4.9	12.2 12.1 12.3 13.3 14.5 16.5 18.6 18.0 19.4 18.1	2.2 2.4 2.4 2.7 2.7 2.9 3.3 3.3 3.2 3.1	3.1 3.3 3.2 3.7 4.1 4.6 4.9 4.3 5.3	2.6 2.3 2.2 2.2 2.4 2.9 3.4 4.0 3.8 3.4	4.2 4.2 4.4 4.7 5.3 6.1 6.9 6.4 7.1
1970 1971 1972 1973 1974 1975 1976 1977 1978	27.5 35.1 42.2 47.2 41.4 55.2 71.4 79.4 90.5 89.8	10.5 16.6 22.9 25.2 15.3 20.6 31.4 38.0 45.4	1.1 1.5 2.2 2.7 1.8 3.3 3.9 4.5 5.0	3.1 4.6 4.9 3.3 5.1 6.9 8.6 10.7		1.3 2.0 2.9 3.2 6 2.6 3.8 5.9 6.7	1.3 5.2 6.0 5.9 .7 2.3 7.4 9.0 4.7	2.9 4.1 5.6 6.2 4.0 4.7 7.3 8.5 10.5	17.0 18.5 19.3 22.1 26.1 34.5 39.9 41.4 45.1 52.6	3.2 3.6 3.0 2.5 2.6 8.6 7.1 6.9 6.2 5.8	3.9 4.5 5.3 6.2 5.3 6.4 8.2 7.8 8.3 7.2	3.7 3.8 3.4 5.4 10.9 10.1 13.5 13.1 15.8 24.8	6.1 6.6 7.7 7.9 7.3 9.5 11.1 13.6 14.8
1980	78.3 91.1 67.1 76.2 91.8 84.3 57.9 87.5 122.5	18.9 19.5 5.0 19.5 39.3 29.7 26.3 41.3 54.8 51.8	4.4 4.5 2.7 3.1 4.7 4.9 5.2 5.5 6.6 6.4	8.0 9.0 3.1 4.0 6.0 5.7 .8 5.6 11.3		5.2 5.2 1.7 3.5 5.1 2.6 2.7 6.1 7.8 9.5	-4.3 .0 5.3 9.2 7.4 4.6 3.8 6.3 2.8	2.7 -2.6 2.1 8.4 14.6 10.1 12.1 17.7 16.7 14.3	59.5 71.6 62.1 56.7 52.6 54.6 31.7 46.2 67.7 60.3	6.1 9.2 7.3 6.3 6.8 8.8 7.5 11.2 9.7	5.7 8.0 5.1 7.4 8.2 6.6 7.5 14.6 18.8 18.3	34.7 40.0 34.7 23.9 17.6 18.7 -4.7 -1.4 12.9 6.6	13.1 14.5 15.0 19.1 20.1 20.5 21.3 21.9 26.4 24.2
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 <i>NAICS: 3</i>	114.4 99.4 100.8 116.8 150.1 176.7 192.0 212.2 173.4 174.6 166.5	44.5 35.1 41.2 56.5 75.8 82.3 92.0 104.8 86.7 77.9 64.6	6.1 5.3 6.3 7.4 11.2 11.9 14.6 17.1 16.1 15.5	12.0 5.8 7.6 9.3 14.9 17.0 16.9 19.6 12.0		8.7 10.2 10.6 15.4 23.2 22.0 20.7 26.0 9.1 5.3 5.1	-1.8 -5.3 9 6.1 8.0 .2 4.5 5.2 5.9 7.5 -1.4	16.1 17.5 17.6 19.6 21.7 26.1 29.5 33.3 29.8 34.8 28.1	69.9 64.3 59.6 60.4 74.3 94.4 99.9 107.4 86.6 96.6 101.9	14.4 18.3 18.4 16.5 20.4 27.6 22.7 25.2 22.0 28.1 26.0	17.0 16.3 16.1 16.0 23.6 28.2 26.6 32.4 26.2 24.8 15.3	16.5 7.4 8 2.8 1.5 7.4 15.3 17.6 7.1 4.6 29.7	22.0 22.3 25.9 25.0 28.9 31.2 35.3 32.3 31.4 39.2 30.9
1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	155.8 148.8 143.9 49.7 69.4 154.1 247.2 304.5 278.6 175.5	82.7 71.2 60.0 -26.9 -7.7 -4.3 40.7 95.6 118.9 96.1 30.7	16.4 16.4 15.8 9.8 9.1 8.0 12.2 18.1 18.7 21.3 17.6	15.3 11.7 7.7 2.0 1.4 1.0 7.1 14.5 19.2 19.8 16.1	4.2 -6.8 4.2 -48.6 -34.4 -14.7 -4.3 9.0 17.4 11.2 4.7	6.2 6.4 5.9 1.9 .0 2.2 .6 -1.4 11.5 -1.1 -4.1	6.4 7.7 -8.9 -4.5 -11.7 -6.8 1.1 -6.8 -16.4 -47.5	34.2 35.9 27.1 16.8 20.7 10.8 31.9 54.2 58.9 61.3 43.9	73.1 77.6 83.9 76.6 55.4 73.8 113.4 151.7 185.7 182.6 144.9	22.1 30.9 26.0 28.2 25.3 24.0 24.3 27.3 32.5 30.2 33.7	25.0 22.8 13.8 11.6 17.8 18.9 24.7 25.7 52.5 51.9 31.3	5.3 2.2 27.6 29.7 1.3 23.5 49.1 79.4 76.6 77.8 66.5	20.7 21.7 16.5 7.1 11.0 7.4 15.3 19.3 24.0 22.7 13.3
2007:	288.9 316.0 244.0 265.7 187.6 160.1 205.7 148.6	105.9 100.6 84.9 92.8 61.0 19.7 40.5	19.1 20.6 22.5 23.0 18.5 14.9 17.7 19.2	20.0 21.0 19.3 19.0 17.1 13.1 14.6 19.6	17.0 10.5 11.6 5.5 14.5 2.0 .1 2.2	3.5 -2.1 -4.5 -1.4 -3.6 -2.0 -2.6 -8.4	-15.1 -8.7 -24.9 -17.0 -35.3 -55.7 -45.4 -53.4	61.4 59.3 60.9 63.7 49.8 47.4 56.2 22.3	183.0 215.4 159.1 172.9 126.6 140.5 165.2 147.1	28.2 33.5 29.3 29.8 29.2 37.1 37.3 31.3	52.4 50.2 42.6 62.4 16.4 48.2 39.1 21.7	78.0 110.9 64.8 57.5 64.5 42.5 79.3 79.7	24.3 20.8 22.5 23.2 16.6 12.7 9.5 14.4
2009: I II	121.6 132.3 129.7	8.0 11.9 6.7	19.3 13.7 10.9	12.8 10.4 8.1	3.2 3.9 3.1	-6.3 -9.1 -9.6	-54.8 -38.5 -16.6	33.9 31.5 10.8	113.6 120.4 122.9	34.7 33.1 35.1	29.6 39.4 37.4	29.4 15.2 15.8	19.8 32.8 34.5

For Standard Industrial Classification (SIC) data, includes primary metal industries, not shown separately.
 Industry groups shown in column headings reflect North American Industry Classification System (NAICS) classification for data beginning 1998. For data on SIC basis, the industry groups would be industrial machinery and equipment (now machinery), electronic and other electric equipment (now electrical equipment, appliances, and components), motor vehicles and equipment (now motor vehicles, bodies and trailers, and parts), food and kindred products (now food and beverage and tobacco products), and chemicals and allied products (now chemical products).

3 See footnote 3 and Note, Table B–91.

TABLE B-93. Sales, profits, and stockholders' equity, all manufacturing corporations, 1968-2009

[Billions of dollars]

	All manufacturing corporations  Profits Stock				l	Ourable goo	ds industrie	S	No	ndurable go	ods industr	ies
V		Pro	fits	0. 1		Pro	fits	0. 1		Pro	fits	0. 1
Year or quarter	Sales (net)	Before income taxes <sup>1</sup>	After income taxes	Stock- holders' equity <sup>2</sup>	Sales (net)	Before income taxes <sup>1</sup>	After income taxes	Stock- holders' equity <sup>2</sup>	Sales (net)	Before income taxes <sup>1</sup>	After income taxes	Stock- holders' equity <sup>2</sup>
1968 1969	631.9 694.6	55.4 58.1	32.1 33.2	265.9 289.9	335.5 366.5	30.6 31.5	16.5 16.9	135.6 147.6	296.4 328.1	24.8 26.6	15.5 16.4	130.3 142.3
1970 1971 1972 1973	708.8 751.1 849.5 1,017.2	48.1 52.9 63.2 81.4	28.6 31.0 36.5 48.1	306.8 320.8 343.4 374.1	363.1 381.8 435.8 527.3	23.0 26.5 33.6 43.6	12.9 14.5 18.4 24.8	155.1 160.4 171.4 188.7	345.7 369.3 413.7 489.9	25.2 26.5 29.6 37.8	15.7 16.5 18.0 23.3	151.7 160.5 172.0 185.4
1973: IV New series:	275.1	21.4	13.0	386.4	140.1	10.8	6.3	194.7	135.0	10.6	6.7	191.7
1973: IV	236.6	20.6	13.2	368.0	122.7	10.1	6.2	185.8	113.9	10.5	7.0	182.1
1974 1975 1976 1977 1978	1,060.6 1,065.2 1,203.2 1,328.1 1,496.4 1,741.8	92.1 79.9 104.9 115.1 132.5 154.2	58.7 49.1 64.5 70.4 81.1 98.7	395.0 423.4 462.7 496.7 540.5 600.5	529.0 521.1 589.6 657.3 760.7 865.7	41.1 35.3 50.7 57.9 69.6 72.4	24.7 21.4 30.8 34.8 41.8 45.2	196.0 208.1 224.3 239.9 262.6 292.5	531.6 544.1 613.7 670.8 735.7 876.1	51.0 44.6 54.3 57.2 62.9 81.8	34.1 27.7 33.7 35.5 39.3 53.5	199.0 215.3 238.4 256.8 277.9 308.0
1980 1981 1982 1983 1984 1985 1986 1987 1987	1,912.8 2,144.7 2,039.4 2,114.3 2,335.0 2,331.4 2,220.9 2,378.2 2,596.2 2,745.1	145.8 158.6 108.2 133.1 165.6 137.0 129.3 173.0 215.3	92.6 101.3 70.9 85.8 107.6 87.6 83.1 115.6 153.8 135.1	668.1 743.4 770.2 812.8 864.2 866.2 874.7 900.9 957.6 999.0	889.1 979.5 913.1 973.5 1,107.6 1,142.6 1,125.5 1,178.0 1,284.7	57.4 67.2 34.7 48.7 75.5 61.5 52.1 78.0 91.6 75.1	35.6 41.6 21.7 30.0 48.9 38.6 32.6 53.0 66.9 55.5	317.7 350.4 355.5 372.4 395.6 420.9 436.3 444.3 468.7 501.3	1,023.7 1,165.2 1,126.4 1,140.8 1,227.5 1,188.8 1,095.4 1,200.3 1,311.5 1,388.5	88.4 91.3 73.6 84.4 90.0 75.6 77.2 95.1 123.7 112.6	56.9 59.6 49.3 55.8 58.8 49.1 50.5 62.6 86.8 79.6	350.4 393.0 414.7 440.4 468.5 445.3 438.4 456.6 488.9 497.7
1990 1991 1992 4 1993 1994 1995 1996 1997 1998 1999 2000	2,810.7 2,761.1 2,890.2 3,015.1 3,255.8 3,528.3 3,757.6 3,920.0 3,949.4 4,148.9 4,548.2	158.1 98.7 31.4 117.9 243.5 274.5 306.6 331.4 314.7 355.3 381.1	110.1 66.4 22.1 83.2 174.9 198.2 224.9 244.5 234.4 257.8 275.3	1,043.8 1,064.1 1,034.7 1,039.7 1,110.1 1,240.6 1,348.0 1,462.7 1,482.9 1,569.3 1,823.1	1,357.2 1,304.0 1,389.8 1,490.2 1,657.6 1,807.7 1,941.6 2,075.8 2,168.8 2,314.2 2,457.4	57.3 13.9 -33.7 38.9 121.0 130.6 146.6 167.0 175.1 198.8 190.7	40.7 7.2 -24.0 27.4 87.1 94.3 106.1 121.4 127.8 140.3 131.8	515.0 506.8 473.9 482.7 533.3 613.7 673.9 743.4 779.9 869.6 1,054.3	1,453.5 1,457.1 1,500.4 1,524.9 1,528.2 1,720.6 1,816.0 1,844.2 1,780.7 1,834.6 2,090.8	100.8 84.8 65.1 79.0 122.5 143.9 160.0 164.4 139.6 156.5	69.4 59.3 46.0 55.7 87.8 103.9 118.8 123.1 106.5 117.5	528.9 557.4 560.8 557.1 576.8 627.0 674.2 719.3 703.0 699.7 768.7
2000: IV	1,163.6	69.2	46.8	1,892.4	620.4	31.2	19.3	1,101.5	543.2	38.0	27.4	790.9
NAICS: 5 2000: IV 2001 2002 2002 2003 2004 2005 2006 2007 2008	1,128.8 4,295.0 4,216.4 4,397.2 4,934.1 5,411.5 5,782.7 6,060.0 6,375.6	62.1 83.2 195.5 305.7 447.5 524.2 604.6 602.8 388.1	41.7 36.2 134.7 237.0 348.2 401.3 470.3 442.7 266.3	1,833.8 1,843.0 1,804.0 1,952.2 2,206.3 2,410.4 2,678.6 2,921.8 2,994.5	623.0 2,321.2 2,260.6 2,282.7 2,537.3 2,730.5 2,910.2 3,015.7 2,971.0	26.9 -69.0 45.9 117.6 200.0 211.3 249.1 246.8 97.9	15.4 -76.1 21.6 88.2 156.5 161.2 192.8 159.4 43.4	1,100.0 1,080.5 1,024.8 1,040.8 1,212.9 1,304.0 1,384.0 1,493.1 1,494.7	505.8 1,973.8 1,955.8 2,114.5 2,396.7 2,681.0 2,872.5 3,044.4 3,404.6	35.2 152.2 149.6 188.1 247.5 312.9 355.5 356.1 290.2	26.3 112.3 113.1 148.9 191.6 240.2 277.5 283.3 222.9	733.8 762.5 779.2 911.5 993.5 1,106.5 1,294.6 1,428.7 1,499.8
2007:         	1,405.8 1,526.5 1,539.4 1,588.3	149.2 172.8 147.6 133.2	117.3 136.3 79.9 109.2	2,775.4 2,900.1 2,959.6 3,052.2	715.8 760.8 767.2 771.8	61.4 75.4 57.1 52.9	47.7 61.0 8.7 42.1	1,441.4 1,490.8 1,500.3 1,539.9	690.0 765.7 772.2 816.5	87.8 97.4 90.6 80.4	69.6 75.3 71.2 67.1	1,334.0 1,409.2 1,459.3 1,512.3
2008:            	1,566.4 1,724.2 1,682.3 1,402.8	150.0 142.7 165.5 –70.1	117.3 109.4 123.6 -84.0	3,086.3 3,082.7 3,059.7 2,749.2	740.5 780.4 757.9 692.2	58.6 47.6 54.6 –63.0	44.8 31.4 36.0 –68.8	1,551.0 1,544.8 1,538.9 1,344.0	825.9 943.7 924.4 710.5	91.3 95.1 110.9 -7.2	72.6 78.0 87.6 –15.2	1,535.3 1,537.9 1,520.8 1,405.3
2009: I II	1,203.6 1,263.2 1,321.9	48.4 81.5 117.6	33.2 60.0 94.3	2,661.5 2,714.4 2,877.2	590.8 598.6 624.6	-6.6 12.3 37.4	-10.9 3.6 28.8	1,301.7 1,315.6 1,419.7	612.7 664.6 697.3	55.0 69.1 80.2	44.1 56.4 65.5	1,359.8 1,398.9 1,457.5

<sup>&</sup>lt;sup>1</sup> In the old series, "income taxes" refers to Federal income taxes only, as State and local income taxes had already been deducted. In the new series, no income taxes have been deducted

Source: Department of Commerce (Bureau of the Census).

Income taxes nave been deducted

2 Annual data are average equity for the year (using four end-of-quarter figures)

3 Beginning with 1988, profits before and after income taxes reflect inclusion of minority stockholders' interest in net income before and after income taxes

4 Data for 1992 (most significantly 1992:I) reflect the early adoption of Financial Accounting Standards Board Statement 106 (Employer's Accounting for
Post-Retirement Benefits Other Than Pensions) by a large number of companies during the fourth quarter of 1992. Data for 1993 (1993:I) also reflect adoption of
Statement 106. Corporations must show the cumulative effect of a change in accounting principle in the first quarter of the year in which the change is adopted.

5 Data based on the North American Industry Classification System (NAICS). Other data shown are based on the Standard Industrial Classification (SIC).

Note: Data are not necessarily comparable from one period to another due to changes in accounting principles, industry classifications, sampling procedures, etc. For explanatory notes concerning compilation of the series, see Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations, Department of Commerce, Bureau of the Census.

 $\begin{array}{c} \text{Table B-94. Relation of profits after taxes to stockholders' equity and to sales, all} \\ \text{manufacturing corporations, } 1959-2009 \end{array}$ 

Year or quarter	Ratio of profits to stock	after income taxes ( nolders' equity—per	annual rate) cent <sup>1</sup>		ofits after income taxe r dollar of sales—cent	
Year or quarter	All manufacturing corporations	Durable goods industries	Nondurable goods industries	All manufacturing corporations	Durable goods industries	Nondurable goods industries
1959	10.4	10.4	10.4	4.8	4.8	4.9
1960	9.2	8.5	9.8	4.4	4.0	4.8
1961	8.9 9.8	8.1	9.6 9.9	4.3	3.9	4.7
1962 1963	10.3	9.6   10.1	10.4	4.5 4.7	4.4 4.5	4.7 4.9
1964	11.6	11.7	11.5	5.2	5.1	5.4
1965 1966	13.0	13.8	12.2 12.7	5.6 5.6	5.7	5.8 5.6
1967	13.4 11.7	14.2 11.7	11.8	5.0	5.6 4.8	5.t 5.3
1968	12.1	12.2	11.9	5.1	4.9	5.1
969	11.5	11.4	11.5	4.8	4.6	5.0
970	9.3	8.3	10.3	4.0	3.5	4.5
971 972	9.7 10.6	9.0   10.8	10.3 10.5	4.1 4.3	3.8 4.2	4.! 4.
973	12.8	13.1	12.6	4.7	4.7	4.8
973: IV	13.4	12.9	14.0	4.7	4.5	5.0
New series:						
973: IV	14.3	13.3	15.3	5.6	5.0	6.1
974	14.9	12.6	17.1	5.5	4.7	6.4
975	11.6	10.3	12.9	4.6	4.1	5.
976 977	13.9 14.2	13.7   14.5	14.2 13.8	5.4 5.3	5.2 5.3	5.! 5.:
978	15.0	16.0	14.2	5.4	5.5	5.3
979	16.4	15.4	17.4	5.7	5.2	6.
980	13.9	11.2	16.3	4.8	4.0	5.6
981 982	13.6 9.2	11.9 6.1	15.2 11.9	4.7 3.5	4.2 2.4	5.° 4.
983	10.6	8.1	12.7	4.1	3.1	4.9
984	12.5	12.4	12.5	4.6	4.4	4.8
985 986	10.1 9.5	9.2 7.5	11.0 11.5	3.8 3.7	3.4 2.9	4.1 4.6
987	12.8	11.9	13.7	4.9	4.5	5.3
987 988 <sup>2</sup>	16.1	14.3	17.8	5.9	5.2	6.0
989	13.5	11.1	16.0	4.9	4.1	5.1
990	10.6 6.2	7.9 1.4	13.1 10.6	3.9 2.4	3.0 .5	4.1 4.
991 992 <sup>3</sup>	2.1	-5.1	8.2	.8	-1.7	3.
993	8.0	5.7	10.0	2.8	1.8	3.7
994	15.8 16.0	16.3   15.4	15.2 16.6	5.4 5.6	5.3 5.2	5.! 6.I
996	16.7	15.7	17.6	6.0	5.5	6.
997	16.7	16.3	17.1	6.2	5.8	6.7
998 999	15.8 16.4	16.4 16.1	15.2 16.8	5.9 6.2	5.9 6.1	6.I 6.4
000	15.1	12.5	18.7	6.1	5.4	6.9
000: IV	9.9	7.0	13.9	4.0	3.1	5.
VAICS: 4						
000: IV		5.6	14.3	3.7	2.5	5.2
001	2.0	-7.0	14.7	.8	-3.3	5.7
002	7.5 12.1	2.1 8.5	14.5 16.3	3.2 5.4	1.0 3.9	5.8 7.1
004	15.8	12.9	19.3	7.1	6.2	8.
005	16.7 17.6	12.4 13.9	21.7 21.4	7.4 8.1	5.9 6.6	9.1 9.1
006 007	15.2	13.9	19.8	7.3	5.3	9.
008800	8.9	2.9	14.9	4.2	1.5	6.5
007:	16.9	13.2	20.9	8.3	6.7	10.1
 	18.8 10.8	16.4 2.3	21.4 19.5	8.9 5.2	8.0 1.1	9.8 9.2
III IV	10.8	10.9	17.8	5.2 6.9	5.4	9.,
008: 1	15.2	11.5	18.9	7.5	6.0	8.8
II	14.2	8.1	20.3	6.3	4.0	8.3
	16.2 -12.2	9.3	23.0	7.3	4.7	9.5 -2.1
IV		-20.5	-4.3	-6.0	-9.9	
2009: I	5.0 8.8	-3.4 1.1	13.0 16.1	2.8 4.7	-1.9 .6	7.2 8.5
	13.1	8.1	18.0	7.1	4.6	9.4

<sup>1</sup> Annual ratios based on average equity for the year (using four end-of-quarter figures). Quarterly ratios based on equity at end of quarter. 2 See footnote 3, Table B–93. 3 See footnote 4, Table B–93. 4 See footnote 5, Table B–93.

Note: Based on data in millions of dollars.

See Note, Table B-93.

Source: Department of Commerce (Bureau of the Census).

TABLE B-95. Historical stock prices and yields, 1949-2003

				Ci	ommon stock	c prices <sup>1</sup>				(Standard	stock yields d & Poor's) cent) <sup>5</sup>
		New York	Stock Excha	ange (NYSE)	indexes <sup>2</sup>						
Year	Composito		Dece	mber 31, 196	65=50		Dow Jones	Standard & Poor's	Nasdaq composite	Dividend-	Earnings-
	Composite (Dec. 31, 2002= 5,000) <sup>3</sup>	Com- posite	Industrial	Transpor- tation	Utility <sup>4</sup>	Finance	industrial average <sup>2</sup>	composite index (1941–43=10) <sup>2</sup>	index (Feb. 5, 1971=100) <sup>2</sup>	price ratio <sup>6</sup>	price ratio <sup>7</sup>
1949		9.02					179.48	15.23		6.59	15.48
1950 1951 1952 1953 1954		10.87 13.08 13.81 13.67 16.19					216.31 257.64 270.76 275.97 333.94	18.40 22.34 24.50 24.73 29.69		6.57 6.13 5.80 5.80 4.95	13.99 11.82 9.47 10.26 8.57
1955 1956 1957 1958		21.54 24.40 23.67 24.56					442.72 493.01 475.71 491.66	40.49 46.62 44.38 46.24		4.08 4.09 4.35 3.97	7.95 7.55 7.89 6.23
1959 1960 1961 1962 1963		30.73 30.01 35.37 33.49 37.51					632.12 618.04 691.55 639.76 714.81	57.38 55.85 66.27 62.38 69.87		3.23 3.47 2.98 3.37 3.17	5.78 5.90 4.62 5.82 5.50 5.32
1964 1965 1966 1967 1968	487.92 536.84 585.47 578.01	43.76 47.39 46.15 50.77 55.37 54.67	46.18 51.97 58.00 57.44	50.26 53.51 50.58 46.96	90.81 90.86 88.38 85.60	44.45 49.82 65.85 70.49	834.05 910.88 873.60 879.12 906.00 876.72	81.37 88.17 85.26 91.93 98.70 97.84		3.01 3.00 3.40 3.20 3.07 3.24	5.52 5.59 6.63 5.73 5.67 6.08
1970 1971 1972 1973	483.39 573.33 637.52 607.11 463.54	45.72 54.22 60.29 57.42 43.84	48.03 57.92 65.73 63.08 48.08	32.14 44.35 50.17 37.74 31.89	74.47 79.05 76.95 75.38 59.58	60.00 70.38 78.35 70.12 49.67	753.19 884.76 950.71 923.88 759.37	83.22 98.29 109.20 107.43 82.85	107.44 128.52 109.90 76.29	3.83 3.14 2.84 3.06 4.47	6.45 5.41 5.50 7.12 11.59
1975 1976 1977 1978 1979	483.55 575.85 567.66 567.81 616.68	45.73 54.46 53.69 53.70 58.32	50.52 60.44 57.86 58.23 64.76	31.10 39.57 41.09 43.50 47.34	63.00 73.94 81.84 78.44 76.41	47.14 52.94 55.25 56.65 61.42	802.49 974.92 894.63 820.23 844.40	86.16 102.01 98.20 96.02 103.01	77.20 89.90 98.71 117.53 136.57	4.31 3.77 4.62 5.28 5.47	9.15 8.90 10.79 12.03 13.46
1980 1981 1982 1983 1984	720.15 782.62 728.84 979.52 977.33	68.10 74.02 68.93 92.63 92.46	78.70 85.44 78.18 107.45 108.01	60.61 72.61 60.41 89.36 85.63	74.69 77.81 79.49 93.99 92.89	64.25 73.52 71.99 95.34 89.28	891.41 932.92 884.36 1,190.34 1,178.48	118.78 128.05 119.71 160.41 160.46	168.61 203.18 188.97 285.43 248.88	5.26 5.20 5.81 4.40 4.64	12.66 11.96 11.60 8.03 10.02
1985 1986 1987 1988 1989	1,142.97 1,438.02 1,709.79 1,585.14 1,903.36	108.09 136.00 161.70 149.91 180.02	123.79 155.85 195.31 180.95 216.23	104.11 119.87 140.39 134.12 175.28	113.49 142.72 148.59 143.53 174.87	114.21 147.20 146.48 127.26 151.88	1,328.23 1,792.76 2,275.99 2,060.82 2,508.91	186.84 236.34 286.83 265.79 322.84	290.19 366.96 402.57 374.43 437.81	4.25 3.49 3.08 3.64 3.45	8.12 6.09 5.48 8.01 7.42
1990 1991 1992 1993 1994	1,939.47 2,181.72 2,421.51 2,638.96 2,687.02	183.46 206.33 229.01 249.58 254.12	225.78 258.14 284.62 299.99 315.25	158.62 173.99 201.09 242.49 247.29	181.20 185.32 198.91 228.90 209.06	133.26 150.82 179.26 216.42 209.73	2,678.94 2,929.33 3,284.29 3,522.06 3,793.77	334.59 376.18 415.74 451.41 460.42	409.17 491.69 599.26 715.16 751.65	3.61 3.24 2.99 2.78 2.82	6.47 4.79 4.22 4.46 5.83
1995 1996 1997 1998 1999	3,078.56 3,787.20 4,827.35 5,818.26 6,546.81	291.15 358.17 456.54 550.26 619.16	367.34 453.98 574.52 681.57 774.78	269.41 327.33 414.60 468.69 491.60	220.30 249.77 283.82 378.12 473.73	238.45 303.89 424.48 516.35 530.86	4,493.76 5,742.89 7,441.15 8,625.52 10,464.88	541.72 670.50 873.43 1,085.50 1,327.33	925.19 1,164.96 1,469.49 1,794.91 2,728.15	2.56 2.19 1.77 1.49 1.25	6.09 5.24 4.57 3.46 3.17
2000 2001 2002 2003 <sup>3</sup>	6,805.89 6,397.85 5,578.89 5,447.46	643.66 605.07 527.62	810.63 748.26 657.37 633.18	413.60 443.59 431.10 436.51	477.65 377.30 260.85 237.77	553.13 595.61 555.27 565.75	10,734.90 10,189.13 9,226.43 8,993.59	1,427.22 1,194.18 993.94 965.23	3,783.67 2,035.00 1,539.73 1,647.17	1.15 1.32 1.61 1.77	3.63 2.95 2.92 3.84

Averages of daily closing prices.

Sources: New York Stock Exchange, Dow Jones & Co., Inc., Standard & Poor's, and Nasdaq Stock Market.

<sup>&</sup>lt;sup>1</sup> Averages of daily closing prices.

<sup>2</sup> Includes stocks as follows: for NYSE, all stocks listed; for Dow Jones industrial average, 30 stocks; for Standard & Poor's (S&P) composite index, 500 stocks; and for Nasdaq composite index, over 5,000.

<sup>3</sup> The NYSE relaunched the composite index on January 9, 2003, incorporating new definitions, methodology, and base value. (The composite index based on December 31, 1965–50 was discontinued.) Subset indexes on financial, energy, and health care were released by the NYSE on January 8, 2004 (see Table B–96). NYSE indexes shown in this table for industrials, utilities, transportation, and finance were discontinued.

<sup>4</sup> Effective April 1993, the NYSE doubled the value of the utility index to facilitate trading of options and futures on the index. Annual indexes prior to 1993 reflect the deviation.

reflect the doubling.

5 Based on 500 stocks in the S&P composite index.

<sup>6</sup> Aggregate cash dividends (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures; annual data are averages of monthly figures.
7 Quarterly data are ratio of earnings (after taxes) for four quarters ending with particular quarter-to-price index for last day of that quarter. Annual data are

TABLE B-96. Common stock prices and yields, 2000-2009

			Со	mmon stock pric	es <sup>1</sup>			Common s (Standard	stock yields I & Poor's) ent) <sup>4</sup>
Year or month	New Y	ork Stock Exchan (December 31, Financial		Health	Dow Jones industrial	Standard & Poor's composite index	Nasdaq composite index (Feb. 5.	Dividend- price ratio <sup>5</sup>	Earnings- price ratio <sup>6</sup>
	Guillhosite	lilidilcidi	Liletyy	care	average <sup>2</sup>	(1941-43=10)2	(Feb. 5, 1971=100) <sup>2</sup>		
2000	6,805.89 6,397.85 5,578.89 5,447.46 6,612.62 7,349.00	5,583.00 6,822.18 7,383.70	5,273.90 6,952.36 9,377.84	5,288.67 5,924.80 6,283.96	10,734.90 10,189.13 9,226.43 8,993.59 10,317.39 10,547.67	1,427.22 1,194.18 993.94 965.23 1,130.65 1,207.23	3,783.67 2,035.00 1,539.73 1,647.17 1,986.53 2,099.32	1.15 1.32 1.61 1.77 1.72 1.83	3.63 2.95 2.92 3.84 4.89 5.36
2006 2007 2008 2009	8,357.99 9,648.82 8,036.88 6,091.02	8,654.40 9,321.39 6,278.38 3,987.04	11,206.94 13,339.99 13,258.42 10,020.30	6,685.06 7,191.79 6,171.19 5,456.63	11,408.67 13,169.98 11,252.62 8,876.15	1,310.46 1,477.19 1,220.04 948.05	2,263.41 2,578.47 2,161.65 1,845.38	1.87 1.86 2.37 2.40	5.78 5.29 3.54
2006: Jan	8,007.35	8,187.86	10,965.30	6,604.09	10,872.48	1,278.72	2,289.99	1.83	5.61
Feb	8,044.86	8,280.82	10,741.43	6,566.87	10,971.19	1,276.65	2,273.67	1.86	
Mar	8,174.34	8,459.04	10,702.23	6,653.63	11,144.45	1,293.74	2,300.26	1.85	
Apr	8,351.28	8,572.54	11,467.85	6,519.78	11,234.68	1,302.18	2,338.68	1.85	
May	8,353.45	8,608.10	11,380.52	6,488.14	11,333.88	1,290.00	2,245.28	1.90	
Jun'e July Aug Sept	7,985.59 8,103.97 8,294.89 8,383.29	8,225.13 8,340.25 8,574.68 8,789.30	10,690.86 11,360.86 11,610.65 10,807.75	6,395.87 6,566.19 6,763.81 6,910.95	10,997.97 11,032.53 11,257.35 11,533.60	1,253.12 1,260.24 1,287.15 1,317.81	2,137.41 2,086.21 2,117.77 2,221.94	1.96 1.94 1.92 1.87 1.83	5.86  5.88
Oct	8,651.02	9,101.77	11,020.11	6,975.17	11,963.12	1,363.38	2,330.17	1.83	5.75
Nov	8,856.30	9,251.53	11,657.36	6,845.16	12,185.15	1,388.63	2,408.70	1.80	
Dec	9,089.55	9,461.77	12,078.39	6,931.01	12,377.62	1,416.42	2,431.91	1.79	
2007: Jan	9,132.04	9,575.21	11,381.56	7,083.45	12,512.89	1,424.16	2,453.19	1.81	
Feb	9,345.98	9,732.63	11,658.11	7,174.03	12,631.48	1,444.79	2,479.86	1.82	5.85
Mar	9,120.57	9,342.66	11,503.16	6,997.30	12,268.53	1,406.95	2,401.49	1.89	
Apr	9,555.98	9,658.88	12,441.16	7,332.01	12,754.80	1,463.65	2,499.57	1.84	
May	9,822.99	9,864.01	13,031.00	7,474.48	13,407.76	1,511.14	2,562.14	1.81	
June	9,896.98	9,754.29	13,639.81	7,268.42	13,480.21	1,514.49	2,595.40	1.81	5.65
July	9,985.42	9,543.66	14,318.49	7,210.07	13,677.89	1,520.70	2,655.08	1.80	
Aug	9,440.44	8,963.67	13,250.28	6,957.87	13,239.71	1,454.62	2,539.50	1.92	
Sept	9,777.59	9,060.63	14,300.99	7,138.20	13,557.69	1,497.12	2,634.47	1.88	
Oct	10,159.33	9,390.30	14,976.30	7,231.60	13,901.28	1,539.66	2,780.42	1.84	
Nov	9,741.15	8,522.71	14,622.23	7,127.40	13,200.58	1,463.39	2,662.80	1.95	
Dec	9,807.36	8,447.99	14,956.77	7,306.60	13,406.99	1,479.23	2,661.55	1.93	4.51
2008: Jan	9,165.10	7,776.77	14,222.14	7,068.98	12,538.12	1,378.76	2,418.09	2.06	
Feb	9,041.52	7,577.54	13,931.92	6,674.75	12,419.57	1,354.87	2,325.83	2.10	
Mar	8,776.21	7,155.51	14,000.91	6,318.44	12,193.88	1,316.94	2,254.82	2.17	4.57
Apr	9,174.10	7,579.73	15,159.35	6,381.98	12,656.63	1,370.47	2,368.10	2.09	
May	9,429.04	7,593.63	16,365.23	6,405.40	12,812.48	1,403.22	2,483.24	2.07	
June	8,996.98	6,798.20	16,272.67	6,243.42	12,056.67	1,341.25	2,427.45	2.15	
July	8,427.37	6,207.89	14,899.86	6,412.48	11,322.38	1,257.33	2,278.14	2.27	
Aug	8,362.20	6,304.58	13,772.04	6,618.92	11,530.75	1,281.47	2,389.27	2.23	3.94
Sept	7,886.29	6,159.18	12,562.82	6,316.05	11,114.08	1,217.01	2,205.20	2.36	
Oct	6,130.39	4,733.74	9,515.71	5,434.03	9,176.71	968.80	1,730.32	2.83	
Nov	5,527.63	3,779.86	9,262.07	5,088.99	8,614.55	883.04	1,542.70	3.11	
Dec	5,525.70	3,673.95	9,136.33	5,090.83	8,595.56	877.56	1,525.89	3.00	
2009: Jan	5,477.14	3,337.14	9,295.97	5,256.13	8,396.20	865.58	1,537.20	3.01	.86
Feb	5,051.42	2,823.74	8,785.04	5,106.78	7,690.50	805.23	1,485.98	3.07	
Mar	4,739.72	2,633.65	8,266.81	4,596.81	7,235.47	757.13	1,432.23	2.92	
Apr	5,338.39	3,313.47	8,839.95	4,771.71	7,992.12	848.15	1,641.15	2.60	
May	5,823.10	3,819.95	9,848.66	5,051.78	8,398.37	902.41	1,726.08	2.41	
June	5,985.64	3,924.19	10,189.64	5,224.16	8,593.00	926.12	1,826.99	2.35	
July	6,026.55	4,000.66	9,765.09	5,410.22	8,679.75	935.82	1,873.84	2.31	1.19
Aug	6,577.18	4,646.60	10,295.91	5,706.96	9,375.06	1,009.72	1,997.51	2.12	
Sept	6,839.88	4,844.93	10,791.73	5,838.22	9,634.97	1,044.55	2,084.75	2.06	
Oct	6,986.35	4,918.07	11,342.57	5,931.28	9,857.34	1,067.66	2,122.85	2.02	
Nov	7,079.38	4,848.04	11,486.95	6,155.21	10,227.55	1,088.07	2,143.53	1.99	
Dec	7,167.51	4,734.07	11,335.23	6,430.25	10,433.44	1,110.38	2,220.60	1.95	

Sources: New York Stock Exchange, Dow Jones & Co., Inc., Standard & Poor's, and Nasdaq Stock Market.

Averages of daily closing prices.
 Includes stocks as follows: for NYSE, all stocks listed (in 2009, over 3,800); for Dow Jones industrial average, 30 stocks; for Standard & Poor's (S&P) composite index, 500 stocks; and for Nasdaq composite index, in 2009, over 2,700.

 The NYSE relaunched the composite index on January 9, 2003, incorporating new definitions, methodology, and base value. Subset indexes on financial, energy, and health care were released by the NYSE on January 8, 2004.

 Based on 500 stocks in the S&P composite index.

Subsection bod stocks in the soar composite index.
5 Aggregate cash dividends (based on latest known annual rate) divided by aggregate market value based on Wednesday closing prices. Monthly data are averages of weekly figures, annual data are averages of monthly figures.
6 Quarterly data are ratio of earnings (after taxes) for four quarters ending with particular quarter-to-price index for last day of that quarter. Annual data are

averages of quarterly ratios

#### AGRICULTURE

#### TABLE B-97. Farm income, 1948-2009

[Billions of dollars]

			- In	come of farm ope	rators from farmin	ng		
			Gross farr	m income				
Year		Cas	h marketing recei	pts			Production	Net
	Total <sup>1</sup>	Total	Livestock and products	Crops <sup>2</sup>	Value of inventory changes <sup>3</sup>	Direct Government payments <sup>4</sup>	expenses	farm income
1948	36.5	30.2	17.1	13.1	1.7	0.3	18.8	17.7
1949	30.8	27.8	15.4	12.4	9		18.0	12.8
1950	33.1 38.3 37.7 34.4 34.2 33.4	28.4 32.8 32.5 31.0 29.8	16.1 19.6 18.2 16.9 16.3	12.4 13.2 14.3 14.1 13.6 13.5	.8 1.2 .9 6 .5	.3 .3 .2 .3	19.5 22.3 22.8 21.5 21.8 22.2	13.6 15.9 14.9 13.0 12.4 11.3
1956	33.9 34.8 39.0 37.9 38.6	30.4 29.7 33.5 33.6 34.0	16.4 17.4 19.2 18.9	14.0 12.3 14.2 14.7 15.0	5 .6 .8 .0	.6 1.0 1.1 .7	22.7 23.7 25.8 27.2 27.4	11.2 11.1 13.2 10.7 11.2
1961	40.5 42.3 43.4 42.3 46.5	35.2 36.5 37.5 37.3 39.4	19.5 20.2 20.0 19.9 21.9	15.7 16.3 17.4 17.4	.3 .6 .6 8	1.5 1.7 1.7 2.2 2.5	28.6 30.3 31.6 31.8 33.6	11.2 12.0 12.1 11.8 10.5 12.9
1966	50.5	43.4	25.0	18.4	1	3.3	36.5	14.0
1967	50.5	42.8	24.4	18.4	.7	3.1	38.2	12.3
1968	51.8	44.2	25.5	18.7	.1	3.5	39.5	12.3
1969	56.4	48.2	28.6	19.6	.1	3.8	42.1	14.3
1970	58.8	50.5	29.5	21.0	.0	3.7	44.5	14.4
1971	62.1	52.7	30.5	22.3	1.4	3.1	47.1	15.0
1972	71.1	61.1	35.6	25.5	.9	4.0	51.7	19.5
1973	98.9	86.9	45.8	41.1	3.4	2.6	64.6	34.4
1974	98.2	92.4	41.3	51.1	-1.6	.5	71.0	27.3
1975	100.6	88.9	43.1	45.8	3.4	.8	75.0	25.5
1976	102.9	95.4	46.3	49.0	-1.5	.7	82.7	20.2
1977	108.8	96.2	47.6	48.6	1.1	1.8	88.9	19.9
1978	128.4	112.4	59.2	53.2	1.9	3.0	103.2	25.2
1979	150.7	131.5	69.2	62.3	5.0	1.4	123.3	27.4
1980	149.3	139.7	68.0	71.7	-6.3	1.3	133.1	16.1
	166.3	141.6	69.2	72.5	6.5	1.9	139.4	26.9
	164.1	142.6	70.3	72.3	-1.4	3.5	140.3	23.8
	153.9	136.8	69.6	67.2	-10.9	9.3	139.6	14.3
	168.0	142.8	72.9	69.9	6.0	8.4	142.0	26.0
1985	161.1	144.0	70.1	73.9	-2.3	7.7	132.6	28.5
	156.1	135.4	71.6	63.8	-2.2	11.8	125.0	31.1
	168.4	141.8	76.0	65.8	-2.3	16.7	130.4	38.0
	177.9	151.3	79.6	71.6	-4.1	14.5	138.3	39.6
	191.6	160.5	83.6	76.9	3.8	10.9	145.1	46.5
1990	197.8	169.3	89.1	80.2	3.3	9.3	151.5	46.3
1991	192.0	168.0	85.8	82.2	2	8.2	151.8	40.2
1992	200.6	171.5	85.8	85.7	4.2	9.2	150.4	50.2
1993	205.0	178.3	90.5	87.8	-4.2	13.4	158.3	46.7
1994	216.1	181.4	88.3	93.1	8.3	7.9	163.5	52.6
1995	210.8	188.2	87.2	101.0	-5.0	7.3	171.1	39.8
1996	235.8	199.4	92.9	106.5	7.9	7.3	176.9	58.9
1997	238.0	207.8	96.5	111.3	.6	7.5	186.7	51.3
1998	232.6	196.5	94.2	102.2	6	12.4	185.5	47.1
1999	234.9	187.8	95.7	92.1	2	21.5	187.2	47.7
2000	241.7	192.1	99.6	92.5	1.6	23.2	191.0	50.7
	249.9	200.0	106.7	93.4	1.1	22.4	195.0	54.9
	230.6	194.6	93.9	100.7	-3.5	12.4	191.4	39.1
	258.6	216.1	105.7	110.5	-2.7	16.5	197.7	60.9
	294.7	238.0	123.5	114.5	11.2	13.0	207.3	87.3
2005	298.4	241.0	124.9	116.1	4	24.4	219.7	78.7
	291.2	240.9	118.6	122.3	-3.1	15.8	232.7	58.5
	338.4	288.5	138.6	149.9	.6	11.9	267.5	70.9
	377.1	324.2	141.1	183.1	-2.4	12.2	290.0	87.1
	335.2	282.1	118.4	163.6	-1.0	12.5	278.1	57.0

Cash marketing receipts, Government payments, value of changes in inventories, other farm-related cash income, and nonmoney income produced by farms including imputed rent of operator residences.

 Crop receipts include proceeds received from commodities placed under Commodity Credit Corporation loans.

Note: Data for 2009 are forecasts.

<sup>3</sup> Physical changes in beginning and ending year inventories of crop and livestock commodities valued at weighted average market prices during the year.
4 Includes only Government payments made directly to farmers.

TABLE B-98. Farm business balance sheet, 1952-2009

[Billions of dollars]

					Assets	10110 01 00					Cla	ims	
			Ph	ysical asse	ets		Fir	nancial ass	ets				
End of year	Total assets	Real estate	Live- stock and poultry <sup>1</sup>	Ma- chinery and motor vehi- cles	Crops <sup>2</sup>	Pur- chased inputs <sup>3</sup>	Total <sup>4</sup>	Invest- ments in coopera- tives	Other <sup>4</sup>	Total claims	Real estate debt <sup>5</sup>	Non– real estate debt <sup>6</sup>	Proprietors' equity
1952	133.1	85.1	14.8	15.0	7.9		10.3	3.2	7.1	133.1	6.2	7.1	119.8
1953	128.7	84.3	11.7	15.6	6.8		10.3	3.3	7.0	128.7	6.6	6.3	115.8
1954	132.6	87.8	11.2	15.7	7.5		10.4	3.5	6.9	132.6	7.1	6.7	118.8
1955	137.0	93.0	10.6	16.3	6.5		10.6	3.7	6.9	137.0	7.8	7.3	121.9
1956	145.7	100.3	11.0	16.9	6.8		10.7	4.0	6.7	145.7	8.5	7.4	129.8
1957	154.5	106.4	13.9	17.0	6.4		10.8	4.2	6.6	154.5	9.0	8.2	137.3
1958	168.7	114.6	17.7	18.1	6.9		11.4	4.5	6.9	168.7	9.7	9.4	149.6
1959	172.9	121.2	15.2	19.3	6.2		11.0	4.8	6.2	172.9	10.6	10.7	151.6
1960	174.4 181.6 188.9 196.7 204.2	123.3 129.1 134.6 142.4 150.5	15.6 16.4 17.3 15.9 14.5	19.1 19.3 19.9 20.4 21.2	6.4 6.5 6.5 7.4 7.0		10.0 10.4 10.5 10.7 11.0	4.2 4.5 4.6 5.0 5.2	5.8 5.9 5.9 5.7 5.8	174.4 181.6 188.9 196.7 204.2	11.3 12.3 13.5 15.0 16.9	11.1 11.8 13.2 14.6 15.3	151.9 157.5 162.2 167.1 172.1
1965	220.8	161.5	17.6	22.4	7.9		11.4	5.4	6.0	220.8	18.9	16.9	185.0
1966	234.0	171.2	19.0	24.1	8.1		11.6	5.7	6.0	234.0	20.7	18.5	194.8
1967	246.1	180.9	18.8	26.3	8.0		12.0	5.8	6.1	246.1	22.6	19.6	203.9
1968	257.2	189.4	20.2	27.7	7.4		12.4	6.1	6.3	257.2	24.7	19.2	213.2
1969	267.8	195.3	22.8	28.6	8.3		12.8	6.4	6.4	267.8	26.4	20.0	221.4
1970	278.8	202.4	23.7	30.4	8.7		13.7	7.2	6.5	278.8	27.2	21.3	230.3
1971	301.8	217.6	27.3	32.4	10.0		14.5	7.9	6.7	301.8	28.8	24.0	248.9
1972	339.9	243.0	33.7	34.6	12.9		15.7	8.7	6.9	339.9	31.4	26.7	281.8
1973	418.5	298.3	42.4	39.7	21.4		16.8	9.7	7.1	418.5	35.2	31.6	351.7
1974 <sup>7</sup>	449.2	335.6	24.6	48.5	22.5		18.1	11.2	6.9	449.2	39.6	35.1	374.5
1975	510.8	383.6	29.4	57.4	20.5		19.9	13.0	6.9	510.8	43.8	39.8	427.3
1976	590.7	456.5	29.0	63.3	20.6		21.3	14.3	6.9	590.7	48.5	45.7	496.5
1977	651.5	509.3	31.9	69.3	20.4		20.5	13.5	7.0	651.5	55.8	52.6	543.1
1978	777.7	601.8	50.1	78.8	23.8		23.2	16.1	7.1	777.7	63.4	60.4	653.9
1979	914.7	706.1	61.4	91.9	29.9		25.4	18.1	7.3	914.7	75.8	71.7	767.2
1980	1,000.4	782.8	60.6	97.5	32.8	2.0	26.7	19.3	7.4	1,000.4	85.3	77.2	838.0
1981	997.9	785.6	53.5	101.1	29.5		28.2	20.6	7.6	997.9	93.9	83.8	820.2
1982	962.5	750.0	53.0	103.9	25.9		29.7	21.9	7.8	962.5	96.8	87.2	778.5
1983	959.3	753.4	49.5	101.7	23.7		30.9	22.8	8.1	959.3	98.1	88.1	773.1
1984	897.8	661.8	49.5	125.8	26.1		32.6	24.3	8.3	897.8	101.4	87.4	709.0
1985	775.9	586.2	46.3	86.1	22.9	1.2	33.3	24.3	9.0	775.9	94.1	78.1	603.8
	722.0	542.4	47.8	79.0	16.3	2.1	34.4	24.4	10.0	722.0	84.1	67.2	570.7
	756.5	563.7	58.0	78.7	17.8	3.2	35.2	25.3	9.9	756.5	75.8	62.7	618.0
	788.5	582.3	62.2	81.0	23.7	3.5	35.9	25.6	10.4	788.5	70.8	62.3	655.4
	813.7	600.1	66.2	84.1	23.9	2.6	36.7	26.3	10.4	813.7	68.8	62.3	682.7
1990	840.6	619.1	70.9	86.3	23.2	2.8	38.3	27.5	10.9	840.6	67.6	63.5	709.5
1991	844.2	624.8	68.1	85.9	22.2	2.6	40.5	28.7	11.8	844.2	67.4	64.4	712.3
1992	867.8	640.8	71.0	84.8	24.2	3.9	43.0	29.4	13.6	867.8	67.9	63.7	736.2
1993	909.2	677.6	72.8	85.4	23.3	3.8	46.3	31.0	15.3	909.2	68.4	65.9	774.9
1994	934.7	704.1	67.9	86.8	23.3	5.0	47.6	32.1	15.5	934.7	69.9	69.0	795.8
1995	965.7	740.5	57.8	87.6	27.4	3.4	49.1	34.1	15.0	965.7	71.7	71.3	822.8
1996	1,002.9	769.5	60.3	88.0	31.7	4.4	49.0	34.9	14.1	1,002.9	74.4	74.2	854.3
1997	1,051.3	808.2	67.1	88.7	32.7	4.9	49.6	35.7	13.9	1,051.3	78.5	78.4	894.4
1998	1,083.4	840.4	63.4	89.8	29.9	5.0	54.7	40.5	14.2	1,083.4	83.1	81.5	918.7
1999	1,138.8	887.0	73.2	89.8	28.3	4.0	56.5	41.9	14.6	1,138.8	87.2	80.5	971.1
2000	1,203.2 1,255.9 1,259.7 1,383.4 1,588.0	946.4 996.2 998.7 1,112.1 1,305.2	76.8 78.5 75.6 78.5 79.4	90.1 92.8 96.2 100.3 107.8	27.9 25.2 23.1 24.4 24.4	4.9 4.2 5.6 5.6 5.7	57.1 58.9 60.4 62.4 65.5	43.0 43.6 44.7 45.6	14.1 15.3 15.8 16.9	1,203.2 1,255.9 1,259.7 1,383.4 1,588.0	84.7 88.5 95.4 83.2 95.7	79.2 82.1 81.8 81.0 86.3	1,039.3 1,085.3 1,082.5 1,219.2 1,406.0
2005	1,779.4 1,923.6 2,055.3 2,005.5 1,943.7	1.487.0 1,625.8 1,751.4 1,692.7 1,633.8	81.1 80.7 80.7 80.6 80.6	113.1 114.2 114.7 115.8 112.3	24.3 22.7 22.7 27.6 27.6	6.5 6.5 7.0 7.2 7.2	67.5 73.7 78.8 81.6 82.1			1,779.4 1,923.6 2,055.3 2,005.5 1,943.7	104.8 108.0 112.7 130.1 132.8	91.6 95.5 101.4 108.8 106.1	1,583.0 1,720.0 1,841.2 1,766.6 1,704.8

Note: Data exclude operator households. Beginning with 1959, data include Alaska and Hawaii.

Data for 2009 are forecasts.

Excludes commercial broilers; excludes horses and mules beginning with 1959 data; excludes turkeys beginning with 1966 data.

 Non-Commodity Credit Corporation (CCC) crops held on farms plus value above loan rate for crops held under CCC.

 Includes fertilizer, chemicals, fuels, parts, feed, seed, and other supplies.
 Beginning with 2004, data available only for total financial assets. Data through 2003 for other financial assets are currency and demand deposits.
 Includes CCC storage and drying facilities loans.
 Does not include CCC crop loans.
 Beginning with 1974 data, farms are defined as places with sales of \$1,000 or more annually.

TABLE B-99. Farm output and productivity indexes, 1948-2008

[1996=100]

			[1000 100]			
		Farm o	output		Productivity	indicators
Year	Total	Livestock and products	Crops	Farm-related output	Farm output per unit of total factor input	Farm output per unit of labor input
1948	44	49	42	32	47	13
1949	43 43	50   52	41 39	28	45   44	14 14
1951	45	54	41	30	46	15
1952 1953	46 46	55 55	42 42	28 27	47 47	16 17
1954	47 48	58   59	42	26 28	48	17
1955 1956	49	61	43 42	30	48 49	18 20
1957 1958	48 51	60   62	42 46	31 35	48   51	21 24
1959	53	65	47	45	51	24
1960 1961	55 56	65 68	49 49	46 45	54 55	27 28
1962 1963	56 58	69   71	50 52	44 46	55 56	28 30
1964	57	72	50	42	57	30 32
1965 1966	59 59	71 73	53 52	42 40	58 58	33 36
1967 1968	61 62	74 74	54 56	40 39	59 60	40 40
1969	63	74	58	37	60	42
1970 1971	62 67	77   79	55 62	33 34	60 64	43 47
1972 1973	68 70	81 81	62 66	35 42	64   66	48 50
1974	65	78	60	41	62	47
1975 1976	70 71	75   79	68 68	38 40	68 67	51 53
1977	75 76	80 80	74 76	42 45	71 67	57 59
19/9	80	81	83	46	70	61
1980 1981	77 83	82 83	75 86	43 36	67 75	60 65
1982 1983	84 73	83 84	87 67	72 73	77 68	71 63
1984	83	83	84	67	79	73
1985 1986	87 84	85 86	88 83	80 76	85   84	83 79
1987	85 81	87 88	83 73	84 99	85 81	78 73
1988 1989	86	88	84	102	88	81
1990 1991	90 90	90 92	89 89	96 97	91 91	91 91
1992	96 91	95 96	97 88	91 95	98 92	98 98
1993 1994	102	101	104	92	99	95 95
1995 1996	97 100	102 100	92 100	104 100	92 100	89 100
1997	105	103	105	111	102	106
1998 1999	105 107	104   108	104 105	122 128	101 102	111 115
2000	107 108	107 107	107 106	118	107 108	128 128
2001	106	109	102	123 117	106	124
2003 2004	108 113	110 108	106 116	109 118	110 117	131 142
2005	111	110 113	112	110 118	114 116	141
2006	112 114	113	111 115	109	113	152 151
2008	113	113	113	110	120	154

Note: Farm output includes primary agricultural activities and certain secondary activities that are closely linked to agricultural production for which information on production and input use cannot be separately observed. Secondary output (alternatively, farm-related output) includes recreation activities, the imputed value of employer-provided housing, land rentals under the Conservation Reserve, and services such as custom machine work and custom livestock feeding.

See Table B-100 for farm inputs.

Table B-100. Farm input use, selected inputs, 1948-2009

	Far (	m employr thousands	nent					Select	ed indexe	es of inpu	t use (19	96=100)			
		Self-		Crops har-		Capita	l input	L	abor inpu	ıt		Inte	rmediate	input	
Year	Total	em- ployed and unpaid family work- ers <sup>2</sup>	Hired work- ers <sup>3</sup>	vested (mil- lions of acres) 4	Total farm input	Total	Dur- able equip- ment	Total	Hired labor	Self- em- ployed and unpaid family labor	Total	Feed and seed	Energy and lubri- cants <sup>5</sup>	Agri- cul- tural chemi- cals	Pur- chased serv- ices
1948 1949	9,759 9,633	7,433 7,392	2,326 2,241	356 360	93 97	115 115	66 78	325 317	277 257	349 347	46 52	55 58	65 72	20 21	44 43
1950 1951 1952 1953 1954	9,283 8,653 8,441 7,904 7,893	6,965 6,464 6,301 5,817 5,782	2,318 2,189 2,140 2,087 2,111	345 344 349 348 346	98 99 99 99 97	118 120 122 123 124	90 100 109 114 120	305 293 287 275 269	268 259 253 246 232	323 311 304 289 288	53 56 56 56 54	59 61 60 61 58	73 76 80 81 81	25 25 26 26 27	45 49 52 50 49
1955 1956 1957 1958 1959	7,719 7,367 6,966 6,667 6,565	5,675 5,451 5,046 4,705 4,621	2,044 1,916 1,920 1,962 1,944	340 324 324 324 324	100 100 100 101 103	124 124 123 121 121	123 124 123 121 121	263 247 229 218 217	228 208 199 201 196	281 266 244 226 227	59 61 63 67 70	65 68 71 76 77	83 83 82 80 81	28 30 29 30 34	51 53 54 56 76
1960	6,155 5,994 5,841 5,500 5,206 4,964	4,260 4,135 3,997 3,700 3,585 3,465	1,895 1,859 1,844 1,800 1,621	324 302 295 298 298 298	102 101 103 103 101 101	121 121 120 120 121 121	123 121 119 119 121 123	205 200 200 192 180 176	196 195 195 195 175 165	208 201 202 190 182 181	69 69 72 74 73	77 76 79 82 79	82 84 85 86 88	34 37 41 45 49 50	73 72 72 71 68 70
1966 1967 1968 1969	4,574 4,574 4,303 4,207 4,050 3,951	3,224 3,036 2,974 2,843	1,499 1,350 1,267 1,233 1,207	294 306 300 290 293	102 102 103 103 105	121 122 123 123 123	126 126 131 136 139	163 154 153 150	149 138 134 135	170 161 162 158 147	78 78 79 81 83	85 86 87 91	91 90 90 92 92	55 62 66 74	70 73 71 69
1970 1971 1972 1973 1974	3,868 3,870 3,947 3,919 3,818	2,727 2,665 2,664 2,702 2,588 2,481	1,224 1,203 1,206 1,245 1,331	305 294 321 328 336	104 104 106 107 106 103	121 121 120 121 123	142 142 145 145 153	142 141 140 139	136 134 134 136 145	145 144 141 136 131	86 89 91 89	92 94 98 97 94	90 89 90 86 102	79 86 94 110 115	65 66 65 70 68 71
1976 1977 1978 1979	3,741 3,660 3,682 3,549 3,605	2,369 2,347 2,410 2,320 2,302	1,372 1,373 1,313 1,272 1,229	337 345 338 348 352	106 106 106 113 115	124 126 127 128	163 169 173 179	135 131 129 131 128	149 145 136 141 140	127 124 125 125 125	88 89 100 103	94 94 105 109	114 120 126 115	89 88 92 100	75 74 89 94
1981	3,497 3,335 3,282 3,091 2,760	2,302 2,241 2,142 1,991 1,930	1,256 1,193 1,291 1,161	366 362 306 348 342	110 109 108 105 102	129 127 125 121 119	187 184 176 168	127 118 117 113	140 125 138 129 117	121 114 106 105 98	95 96 96 93	103 106 106 106 99	108 101 98 102 91	94 83 77 90	81 88 87 85
1986	2,693 2,681 2,727 2,637 2,568	1,740 1,717 1,717 1,725 1,709	953 964 1,002 928	325 302 297 318 322	100 100 100 99 98	115 112 109 107	148 137 130 125	106 108 110 106	112 115 118 111 111	103 105 105 103 93	90 91 91 90 94	100 99 99 95 101	85 95 95 94 94	81 78 78 84 88	80 83 83 89
1991 1992 1993 1994	2,500 2,591 2,505 2,367 2,613 2,597	1,682 1,640 1,510 1,774	909 865 857 839 867	318 319 308 321 314	99 98 99 102 105	105 104 103 102	118 114 110 106	100 97 93 107	110 104 104 101 105	94 94 88 111	96 95 99 101	101 101 103 103 109	94 92 93 95 100	93 93 95 94	89 85 95 100
1995	2,433 2,432 2,284 2,239	1,730 1,602 1,557 1,405 1,326	831 875 879 913	326 333 326 327 325	100 100 103 104 105	100 100 100 99 99	103 100 98 98 98	100 99 94 93	100 105 107 112	100 100 96 87 84 79	100 105 110 114	100 105 111 116	100 102 103 105	100 103 105 104	100 106 113 117
2000	2,126 2,084 2,115 2,066 2,012 1,988	1,211 1,243 1,181 1,188	877 873 872 885 824 780	321 316 324 321	100 100 100 98 96 97	98 98 98 97 97	98 98 99 100 103	84 84 85 82 79	94 95 96 94 87	79 78 79 76 75	109 108 107 105 103	114 111 110 114 112	103 100 109 91 98	103 100 100 93 95	107 110 104 101 98 103
2005	1,988 1,900 1,832 1,786	1,208 1,148 1,082 1,054	750 752 750 732	321 312 322 327 319	97 96 101 94	98 98 97 97	107 109 109 111	79 74 76 73	87 83 90 86	69 68 67	105 107 114 102	113 114 118 110	87 100 88	96 96 105 84	103 105 115 107

<sup>1</sup> Persons involved in farmwork. Total farm employment is the sum of self-employed and unpaid family workers and hired workers shown here.
2 Data from Current Population Survey (CPS) conducted by the Department of Commerce, Census Bureau, for the Department of Labor, Bureau of Labor

 <sup>&</sup>lt;sup>3</sup> Data from national income and product accounts from Department of Commerce, Bureau of Economic Analysis.
 <sup>4</sup> Acreage harvested plus acreages in fruits, tree nuts, and vegetables and minor crops. Includes double-cropping.
 <sup>5</sup> Consists of petroleum fuels, natural gas, electricity, hydraulic fluids, and lubricants.

TABLE B-101. Agricultural price indexes and farm real estate value, 1975-2009

[1990-92=100, except as noted]

	Prio	es receive farmers	d by					Prices p	aid by fa	rmers					Adden-
				All com-				Prod	duction it	ems					dum: Average
Year or month	All farm prod- ucts	Crops	Live- stock and prod- ucts	modities, serv- ices, interest, taxes, and wage rates 1	Total <sup>2</sup>	Feed	Live- stock and poul- try	Fertil- izer	Agri- cul- tural chemi- cals	Fuels	Farm ma- chin- ery	Farm serv- ices	Rent	Wage rates	farm real estate value per acre (dollars) <sup>3</sup>
1975	73 75 73 75 73 83 94 98 100 98 101 91 104 100 102 1102 102 102 102 102 103 104 100 102 1107 102 102 103 104 1107 105 106 1108 1109 1109 1109 1109 1109 1109 1109	88 87 83 89 98 98 101 111 98 86 104 109 103 101 101 101 107 107 115 107 97 115 115 115 115 115 115 115 115 115 11	62 644 644 788 900 889 901 888 911 933 1000 1059 997 1000 909 977 1000 1031 1122 1191 1111 1300 1312 1129 1311 1311 1311 1311 1311 1311	47 500 533 588 666 855 822 866 889 89 1900 1011 1046 1099 1155 1158 1123 1234 1242 1500 1611 1810 179 170 170 170 170 170 170 170 170 1810 181	555 599 617 766 85 992 944 911 104 106 108 877 995 100 101 113 113 111 115 120 148 160 178 183 171 178 178 178 178 178 178 178 178 178	83 83 83 83 83 84 85 86 89 98 81 100 99 99 107 112 95 58 88 83 80 110 100 100 100 100 100 100 100 100	39 477 48 655 888 855 880 788 766 733 744 733 855 9102 102 102 102 102 102 102 102 102 102	87 74 72 72 72 72 77 74 100 100 100 100 100 100 100 100 100 10	72 78 78 78 78 78 78 78 78 78 78 78 78 78	40 43 43 44 48 48 61 61 61 61 61 61 61 61 61 61 61 61 61	38 843 437 511 566 63 70 766 811 85 85 85 89 94 96 100 104 107 113 120 125 125 125 125 125 125 125 125 125 125	5 5 6 6 6 8 8 8 8 8 8 8 8 8 8 8 9 9 6 9 6 9	.00	444 488 555 600 656 770 774 788 818 857 895 1008 1015 111 114 117 123 129 1350 157 1605 167 187 187 187 187 187 187 187 187 187 18	340 397 474 474 531 628 737 819 823 788 801 713 640 599 632 668 683 703 713 736 798 844 877 926 974 1,030 1,210 1,210 2,170 2,170
Apr May June July Aug. Sept Oct Nov Dec	129 130 134 131 127 126 134 135	151 150 159 150 147 142 151 153 148	112 113 112 112 109 108 110 115	180 180 180 179 178 177 178 179 179	185 185 184 182 181 180 180 182 182	185 193 197 190 185 180 180 182 182	122 118 112 113 111 109 110 113	327 309 281 271 257 261 253 254 258	151 151 145 146 141 142 143 150 150	200 207 237 230 241 245 252 265 266	220 220 220 226 226 227 226 226 227	159 159 160 159 159 159 158 158	178 178 178 178 178 178 178 178 178	187 187 187 184 184 184 188 188	

Source: Department of Agriculture (National Agricultural Statistics Service).

<sup>1</sup> Includes items used for family living, not shown separately.
2 Includes other production items, not shown separately.
3 Average for 48 States. Annual data are: March 1 for 1975, February 1 for 1976–81, April 1 for 1982–85, February 1 for 1986–89, and January 1 for 1990–2009.

TABLE B-102. U.S. exports and imports of agricultural commodities, 1950-2009 [Billions of dollars]

				Exports						Imports			
Year	Total <sup>1</sup>	Feed grains	Food grains <sup>2</sup>	Oilseeds and prod- ucts	Cotton	Tobacco	Animals and prod- ucts	Total <sup>1</sup>	Fruits, nuts, and veg- etables <sup>3</sup>	Animals and prod- ucts	Coffee	Cocoa beans and prod- ucts	Agri- cultural trade balance
1950 1951 1952 1953	2.9 4.0 3.4 2.8 3.1	0.2 .3 .3 .3	0.6 1.1 1.1 .7 .5	0.2 .3 .2 .2 .3	1.0 1.1 .9 .5	0.3 .3 .2 .3	0.3 .5 .3 .4	4.0 5.2 4.5 4.2 4.0	0.2 .2 .2 .2	0.7 1.1 .7 .6 .5	1.1 1.4 1.5 1.5	0.2 .2 .2 .2 .3	-1.1 -1.1 -1.1 -1.3 9
1955 1956 1957 1958 1959	3.2 4.2 4.5 3.9 4.0	.3 .4 .3 .5	.6 1.0 1.0 .8 .9	.4 .5 .5 .4	.5 .7 1.0 .7 .4	.4 .3 .4 .4	.6 .7 .7 .5	4.0 4.0 4.0 3.9 4.1	.2 .2 .2 .2	.5 .4 .5 .7	1.4 1.4 1.4 1.2	.2 .2 .2 .2	8 .2 .6 *
1960 1961 1962 1963 1964	4.8 5.0 5.0 5.6 6.3	.5 .5 .8 .9	1.2 1.4 1.3 1.5 1.7	.6 .6 .7 .8 1.0	1.0 .9 .5 .6	.4 .4 .4 .4	.6 .6 .7 .8	3.8 3.7 3.9 4.0 4.1	.2 .2 .2 .3 .3	.6 .7 .9 .9	1.0 1.0 1.0 1.0	.2 .2 .2 .2 .2	1.0 1.3 1.2 1.6 2.3
1965	6.2 6.9 6.4 6.3 6.0	1.1 1.3 1.1 .9	1.4 1.8 1.5 1.4 1.2	1.2 1.2 1.3 1.3 1.3	.5 .4 .5 .5	.4 .5 .5 .5	.8 .7 .7 .7	4.1 4.5 4.5 5.0 5.0	.3 .4 .4 .5 .5	.9 1.2 1.1 1.3 1.4	1.1 1.1 1.0 1.2	.1 .2 .2 .2	2.1 2.4 1.9 1.3 1.1
1970	7.3 7.7 9.4 17.7 21.9	1.1 1.0 1.5 3.5 4.6	1.4 1.3 1.8 4.7 5.4	1.9 2.2 2.4 4.3 5.7	.4 .6 .5 .9	.5 .5 .7 .7	.9 1.0 1.1 1.6 1.8	5.8 5.8 6.5 8.4 10.2	.5 .6 .7 .8	1.6 1.5 1.8 2.6 2.2	1.2 1.2 1.3 1.7 1.6	.3 .2 .2 .3 .5	1.5 1.9 2.9 9.3 11.7
1975 1976 1977 1978 1979	21.9 23.0 23.6 29.4 34.7	5.2 6.0 4.9 5.9 7.7	6.2 4.7 3.6 5.5 6.3	4.5 5.1 6.6 8.2 8.9	1.0 1.0 1.5 1.7 2.2	.9 .9 1.1 1.4 1.2	1.7 2.4 2.7 3.0 3.8	9.3 11.0 13.4 14.8 16.7	.8 .9 1.2 1.5 1.7	1.8 2.3 2.3 3.1 3.9	1.7 2.9 4.2 4.0 4.2	.5 .6 1.0 1.4 1.2	12.6 12.0 10.2 14.6 18.0
1980 1981 1982 1983 1984	41.2 43.3 36.6 36.1 37.8	9.8 9.4 6.4 7.3 8.1	7.9 9.6 7.9 7.4 7.5	9.4 9.6 9.1 8.7 8.4	2.9 2.3 2.0 1.8 2.4	1.3 1.5 1.5 1.5 1.5	3.8 4.2 3.9 3.8 4.2 4.1	17.4 16.9 15.3 16.5 19.3 20.0	1.7 2.0 2.3 2.3 3.1	3.8 3.5 3.7 3.8 4.1	4.2 2.9 2.9 2.8 3.3	.9 .7 .8 1.1	23.8 26.4 21.3 19.6 18.5
1985 1986 1987 1988 1989	29.0 26.2 28.7 37.1 40.0	6.0 3.1 3.8 5.9 7.7	4.5 3.8 3.8 5.9 7.1	5.8 6.5 6.4 7.7 6.4	1.6 .8 1.6 2.0 2.2	1.5 1.2 1.1 1.3 1.3	4.5 5.2 6.4 6.4	21.5 20.4 21.0 21.9	3.5 3.6 3.6 3.8 4.1	4.2 4.5 4.9 5.2 5.1	3.3 4.6 2.9 2.5 2.4	1.4 1.1 1.2 1.0 1.0	9.1 4.7 8.3 16.1 18.2
1990 1991 1992 1993 1994	39.5 39.4 43.2 43.0 46.2	7.0 5.7 5.8 5.0 4.7	4.8 4.2 5.4 5.7 5.3	5.7 6.4 7.3 7.3 7.2	2.8 2.5 2.0 1.6 2.6	1.4 1.4 1.6 1.3 1.3	6.6 7.0 7.9 8.0 9.2	22.9 22.9 24.8 25.1 27.0	4.6 4.6 4.7 5.0 5.3	5.7 5.5 5.7 5.9 5.8	1.9 1.9 1.7 1.5 2.5	1.1 1.1 1.0 1.0	16.6 16.5 18.4 17.9 19.2
1995 1996 1997 1998 1999	56.2 60.4 57.1 51.8 48.4	8.1 9.4 6.0 5.0 5.5	6.7 7.4 5.3 5.0 4.7	8.9 10.8 12.1 9.5 8.1	3.7 2.7 2.7 2.6 1.0	1.4 1.4 1.5 1.5 1.3	10.9 11.1 11.3 10.6 10.4	30.3 33.5 36.1 36.9 37.7	5.9 6.6 6.9 7.7 8.5	6.0 6.1 6.5 6.9 7.3	3.3 2.8 3.9 3.4 2.9	1.1 1.4 1.5 1.7 1.5	25.9 26.9 21.0 14.9 10.7
2000	51.3 53.7 53.1 59.4 61.4	5.2 5.2 5.5 5.4 6.4	4.3 4.2 4.5 5.0 6.3	8.6 9.2 9.6 11.7 10.4	1.9 2.2 2.0 3.4 4.2	1.2 1.3 1.0 1.0 1.0	11.6 12.4 11.1 12.2 10.4	39.0 39.4 41.9 47.4 54.0	8.6 9.0 9.7 10.8 12.2	8.4 9.2 9.0 8.9 10.6	2.7 1.7 1.7 2.0 2.3	1.4 1.5 1.8 2.4 2.5	12.3 14.3 11.2 12.0 7.4
2005	63.2 70.9 90.0 115.3	5.4 7.7 10.9 14.9	5.7 5.5 9.9 13.6	10.2 11.3 15.6 23.7	3.9 4.5 4.6 4.8	1.0 1.1 1.2 1.2	12.2 13.5 17.2 21.8	59.3 65.3 71.9 80.5	13.4 14.6 16.3 17.6	11.5 11.5 12.4 12.0	3.0 3.3 3.8 4.4	2.8 2.7 2.7 3.3	3.9 5.6 18.1 34.8
2008	107.1 88.6	14.1 8.7	13.0 7.1	21.5 20.6	4.6 3.1	1.1 1.0	20.4 16.5	73.9 65.4	16.0 15.9	10.9 9.2	4.1 3.7	2.9 3.0	33.2 23.2

<sup>\*</sup> Less than \$50 million.

Note: Data derived from official estimates released by the Bureau of the Census, Department of Commerce. Agricultural commodities are defined as (1) nonmarine food products and (2) other products of agriculture that have not passed through complex processes of manufacture. Export value, at U.S. port of exportation, is based on the selling price and includes inland freight, insurance, and other charges to the port. Import value, defined generally as the market value in the foreign country, excludes import duties, ocean freight, and marine insurance.

<sup>&</sup>lt;sup>1</sup> Total includes items not shown separately.

<sup>&</sup>lt;sup>2</sup> Rice, wheat, and wheat flour.

<sup>3</sup> Includes fruit, nut, and vegetable preparations. Beginning with 1989, data include bananas but exclude yeasts, starches, and other minor horticultural

#### International Statistics

#### TABLE B-103. U.S. international transactions, 1946-2009

[Millions of dollars; quarterly data seasonally adjusted. Credits (+), debits (-)]

		Goods <sup>1</sup>			Services			Income re	eceipts and	payments	11.21.4	
Year or quarter	Exports	Imports	Balance on goods	Net military trans- actions <sup>2</sup>	Net travel and trans- por- tation	Other services, net	Balance on goods and services	Receipts	Payments	Balance on income	Unilat- eral current trans- fers, net <sup>2</sup>	Balance on current account
1946 1947 1948 1949	11,764 16,097 13,265 12,213	-5,067 -5,973 -7,557 -6,874	6,697 10,124 5,708 5,339	-424 -358 -351 -410	733 946 374 230	310 145 175 208	7,316 10,857 5,906 5,367	772 1,102 1,921 1,831	-212 -245 -437 -476	560 857 1,484 1,355	-2,991 -2,722 -4,973 -5,849	4,885 8,992 2,417 873
1950 1951 1952 1953 1954 1955 1956 1957 1958	10,203 14,243 13,449 12,412 12,929 14,424 17,556 19,562 16,414 16,458	-9,081 -11,176 -10,838 -10,975 -10,353 -11,527 -12,803 -13,291 -12,952 -15,310	1,122 3,067 2,611 1,437 2,576 2,897 4,753 6,271 3,462 1,148	-56 169 528 1,753 902 -113 -221 -423 -849 -831	-120 298 83 -238 -269 -297 -361 -189 -633 -821	242 254 309 307 305 299 447 482 486 573	1,188 3,788 3,531 3,259 3,514 2,786 4,618 6,141 2,466 69	2,068 2,633 2,751 2,736 2,929 3,406 3,837 4,180 3,790 4,132	-559 -583 -555 -624 -582 -676 -735 -796 -825 -1,061	1,509 2,050 2,196 2,112 2,347 2,730 3,102 3,384 2,965 3,071	-4,537 -4,954 -5,113 -6,657 -5,642 -5,086 -4,990 -4,763 -4,647 -4,422	-1,840 884 614 -1,286 219 430 2,730 4,762 784 -1,282
1960 1961 1962 1963 1964 1965 1966 1967	19,650 20,108 20,781 22,272 25,501 26,461 29,310 30,666 33,626 36,414	-14,758 -14,537 -16,260 -17,048 -18,700 -21,510 -25,493 -26,866 -32,991 -35,807	4,892 5,571 4,521 5,224 6,801 4,951 3,817 3,800 635 607	-1,057 -1,131 -912 -742 -794 -487 -1,043 -1,187 -596 -718	-964 -978 -1,152 -1,309 -1,146 -1,280 -1,331 -1,750 -1,548 -1,763	639 732 912 1,036 1,161 1,480 1,497 1,742 1,759 1,964	3,508 4,195 3,370 4,210 6,022 4,664 2,940 2,604 250 91	4,616 4,999 5,618 6,157 6,824 7,437 7,528 8,021 9,367 10,913	-1,238 -1,245 -1,324 -1,560 -1,783 -2,088 -2,481 -2,747 -3,378 -4,869	3,379 3,755 4,294 4,596 5,041 5,350 5,047 5,274 5,990 6,044	-4,062 -4,127 -4,277 -4,392 -4,240 -4,583 -4,955 -5,294 -5,629 -5,735	2,824 3,822 3,387 4,414 6,823 5,431 3,031 2,583 611 399
1970 1971 1972 1973 1974 1975 1976 1977 1978	42,469 43,319 49,381 71,410 98,306 107,088 114,745 120,816 142,075 184,439	-39,866 -45,579 -55,797 -70,499 -103,811 -98,185 -124,228 -151,907 -176,002 -212,007	2,603 -2,260 -6,416 911 -5,505 8,903 -9,483 -31,091 -33,927 -27,568	-641 653 1,072 740 165 1,461 931 1,731 857 -1,313	-2,038 -2,345 -3,063 -3,158 -3,184 -2,812 -2,558 -3,565 -3,573 -2,935	2,330 2,649 2,965 3,406 4,231 4,854 5,027 5,680 6,879 7,251	2,254 -1,303 -5,443 1,900 -4,292 12,404 -6,082 -27,246 -29,763 -24,565	11,748 12,707 14,765 21,808 27,587 25,351 29,375 32,354 42,088 63,834	-5,515 -5,435 -6,572 -9,655 -12,084 -12,564 -13,311 -14,217 -21,680 -32,961	6,233 7,272 8,192 12,153 15,503 12,787 16,063 18,137 20,408 30,873	-6,156 -7,402 -8,544 -6,913 -9,249 -7,075 -5,686 -5,226 -5,788 -6,593	2,331 -1,433 -5,795 7,140 1,962 18,116 4,295 -14,335 -15,143 -285
1981 1982 1983 1984 1985 1986 1987 1988	224,250 237,044 211,157 201,799 219,926 215,915 223,344 250,208 320,230 359,916	-249,750 -265,067 -247,642 -268,901 -332,418 -338,088 -368,425 -409,765 -447,189 -477,665	-25,500 -28,023 -36,485 -67,102 -112,492 -122,173 -145,081 -159,557 -126,959 -117,749	-1,822 -844 112 -563 -2,547 -4,390 -5,181 -3,844 -6,320 -6,749	-997 144 -992 -4,227 -8,438 -9,798 -8,779 -8,010 -3,013 3,551	8,912 12,552 13,209 14,124 14,404 14,483 20,502 19,728 21,725 27,805	-19,407 -16,172 -24,156 -57,767 -109,073 -121,880 -138,538 -151,684 -114,566 -93,142	72,606 86,529 91,747 90,000 108,819 98,542 97,064 108,184 136,713 161,287	-42,532 -53,626 -56,583 -53,614 -73,756 -72,819 -81,571 -93,891 -118,026 -141,463	30,073 32,903 35,164 36,386 35,063 25,723 15,494 14,293 18,687 19,824	-8,349 -11,702 -16,544 -17,310 -20,335 -21,998 -24,132 -23,265 -25,274 -26,169	2,317 5,030 -5,536 -38,691 -94,344 -118,155 -147,177 -160,655 -121,153 -99,486
1990	387,401 414,083 439,631 456,943 502,859 575,204 612,113 678,366 670,416 683,965	-498,438 -491,020 -536,528 -589,394 -668,690 -749,374 -803,113 -876,794 -918,637 -1,031,784	-111,037 -76,937 -96,897 -132,451 -165,831 -174,170 -191,000 -198,428 -248,221 -347,819	-7,599 -5,275 -1,448 1,383 2,570 4,600 5,385 4,968 5,220 2,593	7,501 16,560 19,969 19,714 16,305 21,772 25,015 22,152 10,210 7,085	30,270 34,516 39,164 41,040 48,463 51,414 56,535 63,035 66,651 73,051	-80,864 -31,136 -39,212 -70,311 -98,493 -96,384 -104,065 -108,273 -166,140 -265,090	171,742 149,214 133,766 136,057 166,521 210,244 226,129 256,804 261,819 293,925	-143,192 -125,085 -109,531 -110,741 -149,375 -189,353 -203,811 -244,195 -257,554 -280,037	28,550 24,131 24,234 25,316 17,146 20,891 22,318 12,609 4,265 13,888	-26,654 9,904 -36,636 -39,811 -40,265 -38,074 -43,017 -45,062 -53,187 -50,428	-78,968 2,897 -51,613 -84,805 -121,612 -113,567 -124,764 -140,726 -215,062 -301,630
2001 2001 2002 2003 2004 2005 2006 2007 2008	771,994 718,711 685,170 715,848 806,161 892,337 1,015,812 1,138,384 1,276,994	-1,226,684 -1,148,609 -1,168,002 -1,264,860 -1,477,996 -1,683,188 -1,863,072 -1,969,372 -2,117,245	-454,690 -429,898 -482,831 -549,012 -671,835 -790,851 -847,260 -830,992 -840,252	317 -2,296 -7,158 -11,981 -13,518 -10,536 -7,119 -7,384 -13,881	2,486 -3,254 -4,245 -11,475 -14,275 -13,006 -10,873 2,345 16,175	72,052 69,943 72,633 77,433 89,640 99,124 104,893 134,609 142,021	-379,835 -365,505 -421,601 -495,034 -609,987 -715,268 -760,359 -701,422 -695,936	350,918 290,797 280,942 320,456 413,739 535,263 682,221 818,931 764,637	-329,864 -259,075 -253,544 -275,147 -346,519 -462,905 -634,136 -728,085 -646,406	21,054 31,722 27,398 45,309 67,219 72,358 48,085 90,845 118,231	-58,645 -64,487 -64,948 -71,794 -88,362 -105,772 -91,273 -115,996 -128,363	-417,426 -398,270 -459,151 -521,519 -631,130 -746,683 -803,547 -726,573 -706,568
2008:	315,637 332,876 337,912 290,569 249,374 246,134	-534,482 -554,372 -559,002 -469,389 -373,411 -361,621	-218,846 -221,496 -221,090 -178,820 -124,036 -115,487	-2,543 -3,055 -4,664 -3,618 -3,017 -1,855	3,076 4,922 5,595 2,581 1,985 3,509	35,659 36,784 34,217 35,363 32,661 32,592	-182,653 -182,847 -185,942 -144,495 -92,408 -81,240	202,927 198,796 195,319 167,596 135,352 135,074	-166,241 -172,521 -161,194 -146,450 -117,051 -118,404	36,686 26,274 34,125 21,146 18,301 16,670	-33,330 -31,147 -32,361 -31,527 -30,343 -33,410	-179,298 -187,719 -184,178 -154,875 -104,450 -97,980
     P	263,911	-361,621 -396,050	-115,487 -132,138	-1,855 -2,044	3,509	32,592	-81,240 -97,378	140,403	-118,404 -116,694	23,709	-33,410 -34,365	-97,980 -108,034

 $<sup>^1</sup>$  Adjusted from Census data for differences in valuation, coverage, and timing; excludes military.  $^2$  Includes transfers of goods and services under U.S. military grant programs.

See next page for continuation of table.

## Table B-103. U.S. international transactions, 1946-2009—Continued

[Millions of dollars; quarterly data seasonally adjusted. Credits (+), debits (-)]

					Financia	account				Statistical	discrepancy
V	Capital account	ex	J.Sowned a cluding finan crease/finan	cial derivativ	es	Foreign-ov excludin [increas	vned assets i g financial de e/financial in	n the U.S., rivatives flow (+)]	F:	Total (sum of	Of
Year or quarter	trans- actions, net	Total	U.S. official reserve assets <sup>3</sup>	Other U.S. Govern- ment assets	U.S. private assets	Total	Foreign official assets	Other foreign assets	Financial derivatives, net	the items with sign reversed)	which: Seasonal adjustment discrepancy
			-623								
1947 1948			-3,315 -1,736								
1949			-266								
1950			1,758 -33								
			-33 -415								
1953			1,256								
			480 182								
1956			-869								
			-1,165 2,292								
			1,035								
1960		-4,099	2,145	-1,100	-5.144	2,294	1,473	821		-1,019	
1961 1962		-5,538 -4,174	607	-910 -1.085	-5,235	2,705	765 1,270	1,939		-989 -1 124	
		-4,174 -7,270	1,535 378	-1,085 -1,662	-4,623 -5,986	1,911 3,217	1,270	641 1,231		-1,124 -360	
1964		-9,560	171	-1,680	-8,050	3,643	1,660	1,983		-907	
		-5,716 -7,321	1,225 570	-1,605 -1,543	-5,336 -6,347	742 3,661	134 -672	607 4,333		-457 629	
1967		-9,757	53	-2,423 -2,274	-7,386	7,379	3,451	3,928		-205	
1968 1969		-10,977 -11,585	-870 -1,179	-2,274 -2,200	-7,833 -8,206	9,928 12,702	-774 -1,301	10,703 14,002		438 -1,516	
1970		-9,337	2,481	-2,200 -1,589	-10,229	7,226	7,775	-550		-1,310 -219	
1971		-12,475	2,401	-1,884	-10,223	23,687	27,596	-3,909		-9,779	
1972		-14,497	-4	-1,568	-12,925	22,171	11,185	10,986		-1,879	
1973 1974		-22,874 -34,745	158 -1,467	-2,644 366	-20,388 -33,643	18,388 35,227	6,026 10,546	12,362 24,682		-2,654 -2,444	
1975		-39,703	-849	-3,474	-35,380	16,870	7,027	9,843		4,717	
1976 1977		-51,269 -34,785	-2,558 -375	-4,214 -3,693	-44,498 -30,717	37,839 52,770	17,693 36,816	20,147 15,954		9,134 -3,650	
1978		-61,130	732	-4,660	-57,202	66,275	33,678	32,597		9,997	
I		-66,054	-1,133	-3,746	-61,176	40,693	-12,526	53,218		25,647	
1980 1981		-86,967 -114,147	-8,155 -5,175	-5,162 -5,097	-73,651 -103,875	62,037 85,684	16,649 6,053	45,388 79,631		22,613 23,433	
1982	199	-114,147	-3,175 -4,965	-6,131	-116,786	95,056	3,593	91,464		38,163	
1983	209	-66,373	-1,196	-5,006	-60,172	87,399	5,845	81,554		17,457	
1984 1985	235 315	-40,376 -44,752	-3,131 -3,858	-5,489 -2,821	-31,757 -38,074	116,048 144,231	3,140 -1,119	112,908 145,349		18,437 18,362	
1986	301	-111,723	312	-2,022	-110,014	228,330	35,648	192,681		30,269	
1987 1988	365 493	-79,296 -106,573	9,149 -3,912	1,006 2,967	-89,450 -105,628	247,100 244,833	45,387 39,758	201,713 205,075		-7,514 -17,600	
1989	336	-175,383	-25,293	1,233	-151,323	222,777	8,503	214,274		51,756	
1990	-6,579	-81,234	-2,158	2,317	-81,393	139,357	33,910	105,447		27,425	
1991 1992	-4,479 978	-64,389 -74,410	5,763 3,901	2,923 -1,667	-73,075 -76,644	108,221 168,349	17,388 40,477	90,833 127,872		-42,252 -43,304	
1993	-1,299	-200,551	-1,379	-351	-198,823	279,758	71,753	208,005		6,898	
1994 1995	-1,723 -927	-178,937 -352,264	5,346 -9,742	-390 -984	-183,893 -341,538	303,174 435,102	39,583 109,880	263,591 325,222		-902 31,656	
1996	-735	-413,409	6,668	-989	-419,088	547,885	126,724	421,161		-8,977	
1997	-1,027	-485,475 -353,829	-1,010	68	-484,533	704,452 420,794	19,036 -19,903	685,416 440,697		-77,224	
1998 1999	-766 -4,939	-504,062	-6,783 8,747	-422 2,750	-346,624 -515,559	742,210	43,543	698,667		148,863 68,421	
2000	-1,010	-560,523	-290	-941	-559,292	1,038,224	42,758	995,466		-59,265	
2001 l	11,922	-382,616	-4,911	-486	_377 219	782,870	28,059	754,811		-13,906	
2002 2003	-1,470 -3,480	-294,646 -325,424	-3,681 1,523	345 537	-291,310 -327,484	795,161 858.303	115,945 278,069	679,216 580,234		-39,894 -7,880	
2004	1,323 11,344 -3,906 -1,895	I <i>-</i> 1.000.870 I	2,805	1 710	-291,310 -327,484 -1,005,385 -566,266 -1,293,449 -1,449,731	858,303 1,533,201 1,247,347 2,065,169 2,129,460	397,755 259,268 487,939 480,949	1,135,446 988,079 1,577,230 1,648,511		97,476 36,623 -1,698 64,912	
2005 2006	11,344 _3 906	-546,631 -1,285,729	14,096 2,374	5,539 5,346	-566,266  -1 293 449	1,247,347 2,065,169	259,268 487 939	988,079 1 577 230	29,710	36,623 _1 698	
2007	-1,895	-1,4/2,126	-122	5,539 5,346 –22,273	-1,449,731	2,129,460	480,949	1,648,511	6,222	64,912	
2008	953	-106	-4,848	-529,615	534,357	534,U/I	487,021	47,050	-28,905	200,055	
2008:	-637 -682	-251,501 107,343 29,322	-276 -1,267	3,268 -41,592 -225,997	-254,493 150,202 255,498	426,058 2,003 117,897	208,646 178,826 115,573	217,412 -176,823 2,324	-7,966 -2,355 -4,075	13,344 81,410 38,067	14,659 -3,037
	2,967	29,322	-1/9	-225,997	255,498	117,897	115,573	2,324	-4,075	38,067	-25,884
IV	-695	114,730	-3,126	-265,293	383,150	-11,888	-16,024	4,136	-14,509	67,236	14,264
2009:	−710 −719	94,734 37,398	-982 -3,632	244,102 193,750	-148,387 -152,720	-67,757 14,614	70,892 124,299	-138,649 -109,685	8,407 11,265	69,777 35,422	10,571 -1,806
	-/19 -686	-294,102	-3,032 -49,021	57,928	-303,009	332,407	124,299	208,823	11,200	70,416	-20,677

<sup>&</sup>lt;sup>3</sup> Consists of gold, special drawing rights, foreign currencies, and the U.S. reserve position in the International Monetary Fund (IMF). Source: Department of Commerce (Bureau of Economic Analysis).

Table B-104. U.S. international trade in goods by principal end-use category, 1965-2009

[Billions of dollars; quarterly data seasonally adjusted]

				Exports							Imports			
				Nonagr	icultural p	roducts					Nonpet	troleum pro	oducts	
Year or quarter	Total	Agri- cultural prod- ucts	Total	Indus- trial sup- plies and materi- als	Capital goods except auto- motive	Auto- motive	Other	Total	Petro- leum and prod- ucts	Total	Indus- trial sup- plies and materi- als	Capital goods except auto- motive	Auto- motive	Other
1965 1966 1967 1968 1969	. 29.3 30.7 33.6 36.4	6.3 6.9 6.5 6.3 6.1	20.2 22.4 24.2 27.3 30.3	7.6 8.2 8.5 9.6 10.3	8.1 8.9 9.9 11.1 12.4	1.9 2.4 2.8 3.5 3.9	2.6 2.9 3.0 3.2 3.7	21.5 25.5 26.9 33.0 35.8	2.0 2.1 2.1 2.4 2.6	19.5 23.4 24.8 30.6 33.2	9.1 10.2 10.0 12.0 11.8	1.5 2.2 2.5 2.8 3.4	0.9 1.8 2.4 4.0 4.9	8.0 9.2 9.9 11.8 13.0
1970	. 43.3 . 49.4 . 71.4 . 98.3 . 107.1 . 114.7 . 120.8 . 142.1 . 184.4	7.4 7.8 9.5 18.0 22.4 22.2 23.4 24.3 29.9 35.5	35.1 35.5 39.9 53.4 75.9 84.8 91.4 96.5 112.2 149.0	12.3 10.9 11.9 17.0 26.3 26.8 28.4 29.8 34.2 52.2	14.7 15.4 16.9 22.0 30.9 36.6 39.1 39.8 47.5 60.2	3.9 4.7 5.5 6.9 8.6 10.6 12.1 13.4 15.2 17.9	4.3 4.5 5.6 7.6 10.0 10.8 11.7 13.5 15.3 18.7	39.9 45.6 55.8 70.5 103.8 98.2 124.2 151.9 176.0 212.0	2.9 3.7 4.7 8.4 26.6 27.0 34.6 45.0 42.6 60.4	36.9 41.9 51.1 62.1 77.2 71.2 89.7 106.9 133.4 151.6	12.4 13.8 16.3 19.6 27.8 24.0 29.8 35.7 40.7 47.5	4.0 4.3 5.9 8.3 9.8 10.2 12.3 14.0 19.3 24.6	5.5 7.4 8.7 10.3 12.0 11.7 16.2 18.6 25.0 26.6	15.0 16.4 20.2 23.9 27.5 25.3 31.4 38.6 48.4 52.8
1980	237.0 211.2 201.8 219.9 215.9 223.3 250.2 320.2 359.9	42.0 44.1 37.3 37.1 38.4 29.6 27.2 29.8 38.8 41.1	182.2 193.0 173.9 164.7 181.5 186.3 196.2 220.4 281.4 318.8	65.1 63.6 57.7 52.7 56.8 54.8 59.4 63.7 82.6 90.5	76.3 84.2 76.5 71.7 77.0 79.3 82.8 92.7 119.1 136.9	17.4 19.7 17.2 18.5 22.4 24.9 25.1 27.6 33.4 35.1	23.4 25.5 22.4 21.8 25.3 27.2 28.9 36.4 46.3 56.3	249.8 265.1 247.6 268.9 332.4 338.1 368.4 409.8 447.2 477.7	79.5 78.4 62.0 55.1 58.1 51.4 34.3 42.9 39.6 50.9	170.2 186.7 185.7 213.8 274.4 286.7 334.1 366.8 407.6 426.8	53.0 56.1 48.6 53.7 66.1 62.6 69.9 70.8 83.1 84.6	31.6 37.1 38.4 43.7 60.4 61.3 72.0 85.1 102.2 112.3	28.3 31.0 34.3 43.0 56.5 64.9 78.1 85.2 87.9 87.4	57.4 62.4 64.3 73.3 91.4 97.9 114.2 125.7 134.4 142.5
1990	. 414.1 . 439.6 . 456.9 . 502.9 . 575.2 . 612.1 . 678.4 . 670.4	40.2 40.1 44.1 43.6 47.1 57.2 61.5 58.5 53.2 49.7	347.2 374.0 395.6 413.3 455.8 518.0 550.6 619.9 617.3 634.3	97.0 101.6 101.7 105.1 112.7 135.6 138.7 148.6 139.4 140.3	153.0 166.6 176.4 182.7 205.7 234.4 254.0 295.8 299.8 311.2	36.2 39.9 46.9 51.6 57.5 61.4 64.4 73.4 72.5 75.3	61.0 65.9 70.6 74.0 79.9 86.5 93.6 102.0 105.5 107.5	498.4 491.0 536.5 589.4 668.7 749.4 803.1 876.8 918.6 1,031.8	62.3 51.7 51.6 51.5 51.3 56.0 72.7 71.8 50.9 67.8	436.1 439.3 484.9 537.9 617.4 693.3 730.4 805.0 867.7 964.0	83.0 81.3 89.1 100.8 113.6 128.5 136.1 144.9 151.6 156.3	116.4 121.1 134.8 153.2 185.0 222.1 228.4 253.6 269.8 295.7	88.2 85.5 91.5 102.1 118.1 123.7 128.7 139.4 148.6 179.0	148.5 151.4 169.6 182.0 200.6 219.0 237.1 267.1 297.7 333.0
2000	718.7 685.2 715.8 806.2 892.3 1,015.8 1,138.4 1,277.0	52.8 54.9 54.5 60.9 62.9 64.9 72.9 92.1 118.0	719.2 663.8 630.7 655.0 743.2 827.5 942.9 1,046.3 1,159.0	163.9 150.5 147.6 162.5 192.2 221.5 263.2 302.3 372.0	357.0 321.7 290.4 293.7 327.5 358.4 404.0 433.0 457.7	80.4 75.4 78.9 80.6 89.2 98.4 107.3 121.3	117.9 116.2 113.7 118.2 134.2 149.2 168.4 189.7 207.9	1,226.7 1,148.6 1,168.0 1,264.9 1,478.0 1,683.2 1,863.1 1,969.4 2,117.2	120.3 103.6 103.5 133.1 180.5 251.9 302.4 331.0 453.3	1,106.4 1,045.0 1,064.5 1,131.8 1,297.5 1,431.3 1,560.6 1,638.4 1,664.0	181.9 172.5 164.6 181.4 232.5 272.7 300.1 308.4 333.1	347.0 298.4 283.9 296.4 344.5 380.7 420.0 446.0 455.2	195.9 189.8 203.7 210.1 228.2 239.4 256.6 259.2 233.8	381.6 384.3 412.2 443.8 492.4 538.5 584.0 624.8 641.9
2006: I II III IV	. 252.1 . 255.9	17.5 18.0 18.4 19.0	226.0 234.1 237.6 245.3	61.0 65.7 67.4 69.1	97.9 100.8 100.9 104.4	26.7 26.4 26.6 27.6	40.5 41.2 42.6 44.3	454.6 463.8 476.4 468.3	72.9 78.2 82.9 68.4	381.8 385.6 393.4 399.9	74.1 74.4 77.1 74.5	101.9 104.0 106.5 107.5	64.2 64.1 62.9 65.4	141.6 143.0 146.9 152.4
2007:            	. 277.7 . 289.2 . 302.0	20.0 21.4 24.5 26.2	249.5 256.2 264.7 275.8	69.8 74.7 76.6 81.2	104.9 105.4 109.9 112.9	28.9 29.9 30.6 31.8	46.0 46.2 47.6 49.8	475.6 483.3 494.1 516.4	70.5 77.8 82.3 100.4	405.1 405.5 411.8 416.0	74.8 78.4 78.5 76.7	110.0 109.9 112.1 114.1	63.8 63.1 66.3 66.0	156.5 154.1 154.8 159.3
2008: I II III IV	. 332.9 . 337.9	29.3 31.6 31.4 25.7	286.3 301.3 306.5 264.8	90.7 100.0 103.1 78.2	113.6 116.9 118.1 109.0	31.1 31.2 31.9 27.3	50.9 53.2 53.5 50.3	534.5 554.4 559.0 469.4	112.6 124.4 130.8 85.4	421.9 430.0 428.2 383.9	82.7 86.5 90.2 73.7	115.3 117.5 115.5 106.9	63.7 62.1 58.1 49.9	160.2 163.9 164.3 153.5
2009: I II III P	. 246.1	23.6 25.2 24.8	225.8 220.9 239.2	63.5 65.5 74.4	98.4 93.3 95.5	17.5 16.7 21.6	46.3 45.4 47.6	373.4 361.6 396.1	52.2 56.9 68.9	321.2 304.7 327.2	55.2 46.9 50.0	91.8 86.5 91.1	32.3 31.7 44.5	141.9 139.5 141.6

<sup>&</sup>lt;sup>1</sup> End-use commodity classifications beginning 1978 and 1989 are not strictly comparable with data for earlier periods. See *Survey of Current Business*, June 1988 and July 2001.

Note: Data are on a balance of payments basis and exclude military. In June 1990, end-use categories for goods exports were redefined to include reexports (exports of foreign goods), beginning with data for 1978, reexports are assigned to detailed end-use categories in the same manner as exports of domestic goods.

TABLE B-105. U.S. international trade in goods by area, 2001-2009

[Millions of dollars]

		[IVIIIIVI	is or dollar	2]					
ltem	2001	2002	2003	2004	2005	2006	2007	2008	2009 first 3 quarters at annual rate <sup>1</sup>
EXPORTS									
Total, all countries	718,711	685,170	715,848	806,161	892,337	1,015,812	1,138,384	1,276,994	1,012,559
Europe Euro area <sup>2</sup>	178,229	161,116	169,249	188,913	207,503	239,764	279,476	321,151	251,943
France	111,025 19,693	104,242 18,897	110,301 16,891	123,972 20,770	134,920 22,120	152,282 23,339	176,484 26,436	198,538 28,603	157,255 26,045
Germany	29.363	26,125	28,422	31,016	33,787 11,342	40.770	49,106	54,209	41.933
Germany Italy	9,715	9,898	10,378	10,547	11,342	12,398	14,003	15,330	11,920
United Kingdom	39,701	32,627	33,233	35,336	37,842	44,526	49,395	52,868	44,793
Canada	163,259 158,969	160,915 148,337	169,929 149,049	189,982 171,800	212,192	230,983 221,626	249,949 242,312	261,872 287,806	200,239 229,384
Latin America and Other Western Hemisphere Brazil	15,789	12,310	11,139	13,756	192,257 15,212	18.832	24,061	32,175	24,999
IVIEXICU	101,181	97,305	97,248	110,606	120,160	133,658	135,811	151,147	124,031
Venezuela	5,600	4,021	2,827	4,761	6,413	8,994	10,193	12,604	9,453
Asia and Pacific	188,731 19,108	186,871 22,043	199,192 28,292	220,914 34,324	236,019 41,072	270,810 53,528	301,190 62,786	325,948 69,552	266,709 62,636
India	3,754	4,098	4,980	6,101	7,914	9,622	14,885	17,623	16,599
Japan	55,879	50,298	50,845	52,271	53,118	57,153	60,421	64,457	49,728
Korea, Republic of Singapore	21,203 17,338	21,881 16,042	23,542 16,287	25,581 19,199	27,112 20,212	31,671 23,550	33,657 25,379	33,913 27,633	26,557 21,087
Korea, Republic of Singapore Taiwan	17,394	18,027	17,065	21,157	21,016	22,334	25,415	24,636	16,491
Middle East	18,142	18,061	18,270	21,784	29,634	34,782	42,744	52,343	40,525
Africa Memorandum: Members of OPEC 3	11,383	9,870	10,158	12,768	14,733	17,847	22,713	27,873	23,759
Wemorandum: Wembers of UPEC 3	19,502	17,895	16,662	21,723	31,052	37,994	47,607	63,669	47,077
IMPORTS									
Total, all countries	1,148,609	1,168,002	1,264,860	1,477,996	1,683,188	1,863,072	1,969,375	2,117,245	1,508,109
EuropeEuro area <sup>2</sup>	255,988 166,509	261,340 172,762	285,282 187,948	321,505 209,767	355,431 229,233	383,816 246,867	411,205 268,798	440,802 277,728	322,091 207,759
France	30,422	28,290	29,244	31,608	33,848	37,037	41,544	44,036	33,608
Germany	59,141	62.540	68,201	77,350 28,096	84,992	89.242	94.306	97,597	68,132
Italy United Kingdom	23,768 41,185	24,209 40,596	25,397 42,610	28,096 46,087	30,975 50,800	32,660 53,187	35,027 56,367	36,140 57,884	26,160 45,407
Canada	219.358	212.431	225.357	260.386	295.060	307.109	320.786	342.920	219,735
Canada Latin America and Other Western Hemisphere	199,923	205,610	218,665	257,114 21,164	296,315	335.493	349,409	379,783	275,707
Brazil	14,468	15,782	17,917	21,164	24,441	26,373	25,650	30,449	19,681
Mexico Venezuela	132,542 15,251	136,117 15,094	139,834 17,136	158,464 24,921	173,436 33,978	201,812 37,134	214,582 39,910	219,808 51,424	170,528 26,755
Asia and Pacific	411,473	432,214	462,062	542,073	608,703	684,325	718,565	729,142	577,561
China	102,404	125,316	152,671	196,973	243,886	288,139	321,688	337,963	285,835
India	9,755 126,685	11,822	13,067	15,577 130,094	18,819	21,845 148,560	24,102 146,037	25,739 139,587	21,097 90,933
Japan Korea. Republic of	35,207	121,618 35,605	118,264 37,238	46,177	138,375 43,791	45,811	47,547	48,062	39,115
Korea, Republic ofSingapore	15,080	14,821	15,162	15.407	15,131	17.712	18,423	15,891	15,624
Taiwan	33,641	32,611	32,117	34,985	35,103	38,414	38,489	36,496	27,292
Middle East	36,423 25,444	34,303 22,103	41,470 32,025	51,283 45,636	62,467 65,211	71,907 80,420	77,405 92,005	111,108 113,490	56,217 56,797
Africa  Memorandum: Members of OPEC 3	59,755	53,247	68,346	94,109	124,942	145,367	174,340	242,575	104,260
BALANCE (excess of exports +)									
Total, all countries	-429,898	-482,831	-549.012	-671,835	-790.851	-847.260	-830.992	-840.252	-495,548
EuropeEuro_area <sup>2</sup>	-77,759	-100,224	-116,033	-132,592	-147,928	-144,053	-131,729	-119,651	-70,149
Euro area <sup>2</sup>	-55,483	-68,520	-77,648	-85,795	-94,313	-94,585	-92,313	-79,190	-50,504
FranceGermany	-10,729 -29,778	-9,393 -36,415	-12,354 -39,778	-10,838 -46,334	-11,727 -51,204	-13,698 -48,472	-15,108 -45,200	-15,433 -43,387	-7,564 -26,199
Italy	-14,053	-14,311	-15,020	-17,550	-19,633	-20,262	-21,024	-20,810	-14,239
United Kingdom	-1,484	-7,969	-9,377	-10,751	-12,958	-8,661	-6,971	-5,015	-615
Canada Latin America and Other Western Hemisphere	-56,099 -40,955	-51,516 -57,273	-55,428 -69,615	-70,403 -85,314	-82,868 -104,059	-76,126 -113,867	-70,837 -107,097	-81,049 -91,977	-19,496 -46,324
Brazil	1.321	-3.472	-6,778	-7,408	-9.229	-7,541	-1.588	1,726	5,317
Mexico	-31,361	-38,812	-42,586	-47,857	-53,276	-68,153	-78,771	-68,661	-46,496
Venezuela	-9,651	-11,073	-14,309	-20,160	-27,565	-28,140	-29,717	-38,820	-17,304
Asia and Pacific	-222,742 -83,296	-245,344 -103,274	-262,869 -124,379	-321,159 -162,649	-372,684 -202,813	-413,515 -234,612	-417,375 -258,902	-403,194 -268,411	-310,852 -223,199
India	-6,001	-7,724	-8.088	-9,477	-10,905	-12,223	-9.217	-8.116	-4,500
.lanan	-70,806	-71,320	-67,419	-77,823	-85,257	-91,407	-85,616	-75,130	-41,205
Korea, Republic of Singapore Taiwan	-14,004 2,258	-13,724 1,221	-13,697 1,125	-20,596 3,793	-16,679 5,080	-14,140 5,838	-13,890 6,956	-14,149 11,741	-12,557 5,464
Taiwan	-16,248	-14,584	-15,052	-13,829	-14,087	-16,080	-13,074	-11,860	-10,801
Middle East	-18,282	-16,242	-23,199	-29,499	-32,833	-37,126	-34,661	-58,764	-15,692
Africa  Memorandum: Members of OPEC 3	-14,062	-12,233	-21,867	-32,867	-50,479	-62,574	-69,292	-85,617	-33,036
iviemoranaum: iviembers of UPEC 3	-40,253	-35,351	-51,684	-72,386	-93,889	-107,373	-126,733	-178,907	-57,183

Preliminary; seasonally adjusted.
 Euro area consists of: Austria, Belgium, Cyprus (beginning in 2008), Finland, France, Germany, Greece (beginning in 2001), Ireland, Italy, Luxembourg, Malta (beginning in 2008), Novenia (beginning in 2007), and Spain.
 Organization of Petroleum Exporting Countries, consisting of Algeria, Angola (beginning in 2007), Ecuador (beginning in 2007), Indonesia (ending in 2008), Iran, Iran, Kuwait, Libya, Nigeria, Datar, Saudi Arabia, United Arab Emirates, and Venezuela.

 For thirthe data in an additional data by country see Sympus of Current Business.

Note: Data are on a balance of payments basis and exclude military. For further details, and additional data by country, see Survey of Current Business, January 2010.

Source: Department of Commerce (Bureau of Economic Analysis).

TABLE B-106. U.S. international trade in goods on balance of payments (BOP) and Census basis, and trade in services on BOP basis, 1981-2009

[Billions of dollars; monthly data seasonally adjusted]

			Goo (f.a.s	ds: Expor s. value) <sup>1</sup>	ts 1, 2						ods: Impo toms valu				Ser (BOP	vices basis)
		(	Census ba	asis (by e	nd-use c	ategory)				Census I	oasis (by e	end-use o	category)			
Year or month	Total, BOP basis <sup>3</sup>	Total, Census basis <sup>3, 4</sup>	Foods, feeds, and bev- erages	Indus- trial sup- plies and mate- rials	Capi- tal goods except auto- mo- tive	Auto- motive vehi- cles, parts, and en- gines	Con- sumer goods (non- food) except auto- motive	Total, BOP basis	Total, Census basis <sup>4</sup>	Foods, feeds, and bev- erages	Indus- trial sup- plies and mate- rials	Capi- tal goods except auto- mo- tive	Auto- motive vehi- cles, parts, and en- gines	Con- sumer goods (non- food) except auto- motive	Ex- ports	lm- ports
1981 1982 1983 1984 1985 1986 1987 1988	237.0 211.2 201.8 219.9 215.9 223.3 250.2 320.2 359.9	238.7 216.4 205.6 224.0 7218.8 7227.2 254.1 322.4 363.8	31.3 30.9 31.5 24.0 22.3 24.3 32.3 37.2	61.7 56.7 61.7 58.5 57.3 66.7 85.1 99.3	72.7 67.2 72.0 73.9 75.8 86.2 109.2 138.8	15.7 16.8 20.6 22.9 21.7 24.6 29.3 34.8	14.3 13.4 13.3 12.6 14.2 17.7 23.1 36.4	265.1 247.6 268.9 332.4 338.1 368.4 409.8 447.2 477.7	261.0 244.0 258.0 6330.7 6336.5 365.4 406.2 441.0 473.2	17.1 18.2 21.0 21.9 24.4 24.8 24.8 25.1	112.0 107.0 123.7 113.9 101.3 111.0 118.3 132.3	35.4 40.9 59.8 65.1 71.8 84.5 101.4 113.3	33.3 40.8 53.5 66.8 78.2 85.2 87.7 86.1	39.7 44.9 60.0 68.3 79.4 88.7 95.9 102.9	57.4 64.1 64.3 71.2 73.2 86.7 98.7 110.9 127.1	45.5 51.7 55.0 67.7 72.9 80.1 90.8 98.5 102.5
1990	387.4 414.1 439.6 456.9 502.9 575.2 612.1 678.4 670.4 684.0	393.6 421.7 448.2 465.1 512.6 584.7 625.1 689.2 682.1 695.8	35.1 35.7 40.3 40.6 42.0 50.5 55.5 51.5 46.4 46.0	104.4 109.7 109.1 111.8 121.4 146.2 147.7 158.2 148.3 147.5	152.7 166.7 175.9 181.7 205.0 233.0 253.0 294.5 299.4 310.8	37.4 40.0 47.0 52.4 57.8 61.8 65.0 74.0 72.4 75.3	43.3 45.9 51.4 54.7 60.0 64.4 70.1 77.4 80.3 80.9	498.4 491.0 536.5 589.4 668.7 749.4 803.1 876.8 918.6 1,031.8	495.3 488.5 532.7 580.7 663.3 743.5 795.3 869.7 911.9 1,024.6	26.6 26.5 27.6 27.9 31.0 33.2 35.7 39.7 41.2 43.6	143.2 131.6 138.6 145.6 162.0 181.8 204.5 213.8 200.1 221.4	116.4 120.7 134.3 152.4 184.4 221.4 228.1 253.3 269.5 295.7	87.3 85.7 91.8 102.4 118.3 123.8 128.9 139.8 148.7 179.0	105.7 108.0 122.7 134.0 146.3 159.9 172.0 193.8 217.0 241.9	147.8 164.3 177.3 185.9 200.4 219.2 239.5 256.1 262.8 281.9	117.7 118.5 119.6 123.8 133.1 141.4 152.6 165.9 180.7 199.2
2000	772.0 718.7 685.2 715.8 806.2 892.3 1,015.8 1,138.4 1,277.0	781.9 729.1 693.1 724.8 814.9 901.1 1,026.0 1,148.2 1,287.4	47.9 49.4 49.6 55.0 56.6 59.0 66.0 84.3 108.3	172.6 160.1 156.8 173.0 203.9 233.0 276.0 316.4 388.0	356.9 321.7 290.4 293.7 327.5 358.4 404.0 433.0 457.7	80.4 75.4 78.9 80.6 89.2 98.4 107.3 121.3 121.5	89.4 88.3 84.4 89.9 103.2 115.3 129.1 146.0 161.3	1,226.7 1,148.6 1,168.0 1,264.9 1,478.0 1,683.2 1,863.1 1,969.4 2,117.2	1,218.0 1,141.0 1,161.4 1,257.1 1,469.7 1,673.5 1,853.9 1,957.0 2,103.6	46.0 46.6 49.7 55.8 62.1 68.1 74.9 81.7 89.0	299.0 273.9 267.7 313.8 412.8 523.8 602.0 634.7 779.5	347.0 298.0 283.3 295.9 343.6 379.3 418.3 444.5 453.7	195.9 189.8 203.7 210.1 228.2 239.4 256.6 259.2 233.8	281.8 284.3 307.8 333.9 372.9 407.2 442.6 474.6 481.6	298.6 286.2 292.3 304.3 353.1 389.1 435.9 504.8 549.6	223.7 221.8 231.1 250.4 291.2 313.5 349.0 375.2 405.3
2008: Jan Feb Apr Apr June July Sept Oct Nov Dec	103.8 106.8 105.1 109.0 109.5 114.4 117.2 114.7 106.0 103.8 97.5 89.2	104.7 107.9 105.8 109.8 110.1 115.1 118.2 115.9 106.6 104.8 98.5	8.7 9.0 9.4 9.5 9.5 10.0 10.0 9.9 9.0 8.3 7.9	30.0 32.2 32.3 33.1 34.2 36.7 37.9 37.0 32.4 31.4 27.6 23.2	38.2 38.1 37.4 39.1 38.4 40.1 40.4 37.6 37.5 36.4 35.1	10.4 10.9 9.8 10.2 10.2 10.8 11.5 10.3 10.2 10.0 9.2 8.1	13.3 13.4 12.8 13.5 13.5 14.0 14.6 13.9 13.5 13.3 13.2	177.7 180.1 176.6 183.5 183.2 187.6 194.5 186.8 177.7 175.2 151.8 142.4	176.8 178.3 174.9 181.8 182.3 186.7 193.3 186.1 176.2 174.4 151.0	7.2 7.2 7.4 7.6 7.4 7.5 7.8 7.6 7.6 7.4 7.2	65.4 63.7 63.5 68.0 68.0 73.2 79.9 73.4 65.9 66.1 48.8 43.6	37.9 38.6 38.4 39.1 39.4 38.5 38.7 38.0 38.4 37.2 35.4 34.1	21.2 22.3 20.2 21.2 20.4 20.5 20.3 19.3 18.6 17.9 16.7 15.2	39.8 41.2 40.1 40.5 41.5 41.4 41.0 42.0 40.1 37.4 36.7	45.5 44.8 45.3 45.9 47.1 47.2 47.2 47.0 46.0 45.9 44.0 43.7	33.1 33.2 33.2 33.4 33.9 34.2 34.8 35.7 34.4 33.9 33.0 32.4
2009: Jan Feb Apr May June July Sept Oct Nov P	82.4 84.4 82.6 80.0 82.1 84.1 86.8 90.3 93.5 94.6	83.2 85.2 83.6 80.8 83.1 85.0 87.8 87.6 91.1 94.8 95.6	7.1 7.3 7.6 7.9 8.1 7.8 7.9 7.5 7.7	22.2 22.4 21.1 23.2 24.4 24.8 25.7 27.1 27.6 27.0	33.2 33.3 31.9 30.9 31.0 31.4 32.2 30.9 32.5 33.7 34.1	5.6 6.0 5.8 5.4 5.5 6.8 7.3 7.5 7.9 8.6	11.4 12.8 12.4 11.9 12.1 12.1 12.4 12.3 12.8 13.7 13.0	130.0 121.6 121.8 119.9 119.3 122.4 129.5 128.8 137.7 138.6 143.0	129.6 121.2 121.4 119.5 119.0 122.1 129.3 128.4 137.3 138.2 142.6	6.9 6.7 6.8 6.7 6.8 6.9 6.8 6.7 6.7 6.9 6.8	38.5 34.3 34.5 33.7 33.1 37.0 38.3 37.5 42.9 41.1 43.1	31.9 30.1 29.6 28.6 28.9 28.9 30.1 30.1 30.9 31.9 33.2	11.5 10.2 10.6 10.5 10.2 11.1 13.4 14.7 16.3 16.9 16.9	36.1 34.6 35.2 35.5 35.5 35.7 35.4 34.8 35.4 36.6 38.0	41.6 40.9 40.3 41.7 41.4 42.1 42.6 42.9 43.1 43.5 43.6	30.9 30.3 30.0 30.3 30.0 30.7 31.3 31.2 31.4 31.6 31.6

Note: Goods on a Census basis are adjusted to a BOP basis by the Bureau of Economic Analysis, in line with concepts and definitions used to prepare international and national accounts. The adjustments are necessary to supplement coverage of Census data, to eliminate duplication of transactions recorded elsewhere in international accounts, and to value transactions according to a standard definition.

Data include international trade of the U.S. Virgin Islands, Puerto Rico, and U.S. Foreign Trade Zones.

Source: Department of Commerce (Bureau of the Census and Bureau of Economic Analysis).

Department of Defense shipments of grant-aid military supplies and equipment under the Military Assistance Program are excluded from total exports through 1985 and included beginning 1986.

 Fa.s. (free alongside ship) value basis at U.S. port of exportation for exports.

 Beginning with 1989 data, exports have been adjusted for undocumented exports to Canada and are included in the appropriate end-use categories. For prior years, only total exports include this adjustment.

 Total includes "other" exports or imports, not shown separately.

 Total arrivals of imported goods other than in-transit shipments.

 Total includes revisions not reflected in detail.

<sup>6</sup> Total includes revisions not reflected in detail.

<sup>&</sup>lt;sup>7</sup> Total exports are on a revised statistical month basis; end-use categories are on a statistical month basis.

Table B-107. International investment position of the United States at year-end, 2001-2008 [Millions of dollars]

	L.							
Type of investment	2001	2002	2003	2004	2005	2006	2007	2008 p
NET INTERNATIONAL INVESTMENT POSITION OF THE UNITED STATES	-1,868,875	-2,037,970	-2,086,513	-2,245,417	-1,925,146	-2,184,282	-2,139,916	-3,469,246
Financial derivatives, net 1					57,915	59,836	71,472	159,582
Net international investment position, excluding financial derivatives	-1,868,875	-2,037,970	-2,086,513	-2,245,417	-1,983,061	-2,244,118	-2,211,388	-3,628,828
U.SOWNED ASSETS ABROADFinancial derivatives, gross positive fair value 1	6,308,681	6,649,079	7,638,086	9,340,634	11,961,552 1,190,029	14,428,137 1,238,995	18,278,842 2,559,332	19,888,158 6,624,549
U.Sowned assets abroad, excluding financial derivatives	6,308,681	6,649,079	7,638,086	9,340,634	10,771,523	13,189,142	15,719,510	13,263,609
U.S. official reserve assets	129,961 72,328 10,783	158,602 90,806 12,166	183,577 108,866 12.638	189,591 113,947 13,628	188,043 134,175 8,210	219,853 165,267 8,870	277,211 218,025 9,476	293,732 227,439 9,340
Reserve position in the International Monetary Fund	17,869	21,979	22,535	19,544	8,036	5,040	4,244	7,683
Foreign currenciesU.S. Government assets, other than official	28,981	33,651	39,538	42,472	37,622	40,676	45,466	49,270
reserve assets U.S. credits and other long-term assets <sup>3</sup> Repayable in dollars Other <sup>4</sup>	85,654 83,132 82,854 278	85,309 82,682 82,406 276	84,772 81,980 81,706 274	83,062 80,308 80,035 273	77,523 76,960 76,687 273	72,189 71,635 71,362 273	94,471 70,015 69,742 273	624,100 69,877 69,604 273
U.S. foreign currency holdings and U.S. short- term assets <sup>5</sup>	2,522	2,627	2,792	2,754	563	554	24,456	554,222
U.S. private assets Direct investment at current cost Foreign securities Bonds	6,093,066 1,693,131 2,169,735 557,062	6,405,168 1,867,043 2,076,722 702,742	7,369,737 2,054,464 2,948,370 868,948	9,067,981 2,498,494 3,545,396 984,978	10,505,957 2,651,721 4,329,259 1,011,554	12,897,100 2,948,172 5,604,475 1,275,515	15,347,828 3,451,482 6,835,079 1,587,089	12,345,777 3,698,784 4,244,311 1,392,903
Corporate stocks	1,612,673	1,373,980	2,079,422	2,560,418	3,317,705	4,328,960	5,247,990	2,851,408
reported by U.S. nonbanking concerns <sup>6</sup> U.S. claims reported by U.S. banks, not	839,303 1.390.897	901,946 1.559.457	594,004 1.772.899	793,556 2.230.535	1,018,462 2.506.515	1,184,073 3.160.380	1,239,718 3.821.549	991,920 3.410.762
included elsewhere 7 FOREIGN-OWNED ASSETS IN THE UNITED	1,390,097	1,009,407	1,//2,099	2,230,333	2,300,313	3,100,300	3,021,049	3,410,702
STATESFinancial derivatives, gross negative fair value 1	8,177,556	8,687,049	9,724,599	11,586,051	13,886,698 1,132,114	16,612,419 1,179,159	20,418,758 2,487,860	23,357,404 6,464,967
Foreign-owned assets in the United States, excluding financial derivatives	8,177,556	8,687,049	9,724,599	11,586,051	12,754,584	15,433,260	17,930,898	16,892,437
Foreign official assets in the United States U.S. Government securities U.S. Treasury securities Other Other U.S. Government liabilities <sup>8</sup>	1,109,072 847,005 720,149 126,856 17.007	1,250,977 970,359 811,995 158,364 17,144	1,562,564 1,186,500 986,301 200,199 16,421	2,011,899 1,509,986 1,251,943 258,043 16,287	2,306,292 1,725,193 1,340,598 384,595 15,866	2,825,628 2,167,112 1,558,317 608,795 18.682	3,403,995 2,540,062 1,736,687 803,375 24,024	3,871,362 3,228,438 2,325,672 902,766 32,650
U.S. liabilities reported by U.S. banks, not included elsewhere <sup>9</sup> Other foreign official assets	134,655 110,405	155,876 107,598	201,054	270,387 215,239	296,647 268,586	297,012 342,822	406,031 433,878	252,588 357,686
Other foreign assets Direct investment at current cost U.S. Treasury securities	7,068,484 1,518,473 375,059	7,436,072 1,499,952 473,503	8,162,035 1,580,994 527,223	9,574,152 1,742,716 561,610	10,448,292 1,905,979 643,793	12,607,632 2,154,062 567,861	14,526,903 2,450,132 639,715	13,021,075 2,646,847 884,965
U.S. securities other than U.S. Treasury securities Corporate and other bonds Corporate stocks U.S. currency	2,821,372 1,343,071 1,478,301 229,200	2,779,067 1,530,982 1,248,085 248,061	3,422,856 1,710,787 1,712,069 258,652	3,995,506 2,035,149 1,960,357 271,953	4,352,998 2,243,135 2,109,863 280,400	5,372,339 2,824,871 2,547,468 282,627	6,190,067 3,289,077 2,900,990 271,952	4,703,529 2,865,903 1,837,626 301,139
U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns 10 U.S. liabilities reported by U.S. banks, not	798,314	897,335	450,884	600,161	658,177	799,471	1,000,430	873,227
included elsewhere 11 '	1,326,066	1,538,154	1,921,426	2,402,206	2,606,945	3,431,272	3,974,607	3,611,368
Memoranda: Direct investment abroad at market value Direct investment in the United States at market value	2,314,934 2,560,294	2,022,588 2,021,817	2,729,126 2,454,877	3,362,796 2,717,383	3,637,996 2,817,970	4,470,343 3,293,053	5,227,962 3,593,291	3,071,189 2,556,882

 $<sup>^1</sup>$  A break in series in 2005 reflects the introduction of U.S. Department of the Treasury data on financial derivatives.  $^2$  U.S. official gold stock is valued at market prices.

Note: For details regarding these data, see Survey of Current Business, July 2009.

<sup>&</sup>lt;sup>3</sup> Also includes paid-in capital subscriptions to international financial institutions and resources provided to foreigners under foreign assistance programs requiring repayment over several years. Excludes World War I debts that are not being serviced.

<sup>4</sup> Includes indebtedness that the borrower may contractually, or at its option, repay with its currency, with a third country's currency, or by delivery of materials or transfer of services.

materials or transfer or is services.

Seginning in 2007, includes foreign-currency-denominated assets obtained through temporary reciprocal currency arrangements between the Federal Reserve System and foreign central banks.

A break in series in 2003 reflects the reclassification of assets reported by U.S. securities brokers from nonbank-reported assets to bank-reported assets, and a reduction in counterparty balances to eliminate double counting. A break in series in 2005 reflects the addition of previously unreported claims of U.S. financial intermedianies on their foreign parents associated with the issuance of asset-backed commercial paper in the United States.

Also includes claims reported by U.S. securities brokers. A break in series in 2003 reflects the reclassification of assets reported by U.S. securities brokers.

from nonbank-reported assets to bank-reported assets.

<sup>8</sup> Primarily U.S. Government liabilities associated with military sales contracts and other transactions arranged with or through foreign official agencies.

<sup>&</sup>lt;sup>9</sup> Also includes liabilities reported by U.S. securities brokers.

<sup>10</sup> A break in series in 2003 reflects the reclassification of liabilities reported by U.S. securities brokers from nonbank-reported liabilities to bank-reported liabilities and a reduction in counterparty balances to eliminate double counting.

<sup>11</sup> Also includes liabilities reported by U.S. securities brokers. A break in series in 2003 reflects the reclassification of liabilities reported by U.S. securities brokers from nonbank-reported liabilities to bank-reported liabilities.

Table B–108. Industrial production and consumer prices, major industrial countries,  $1982\hbox{--}2009$ 

			1702 20	,,,,			
Year or quarter	United States <sup>1</sup>	Canada	Japan	France	Germany <sup>2</sup>	Italy	United Kingdom
	I		Industrial	production (Index, 2	2002=100) <sup>3</sup>		
1982 1983 1984 1985	54.1 55.6 60.5 61.3	53.2 56.1 63.1 66.3	74.5 76.8 84.0 87.1	73.6 73.6 74.9 75.4	69.5 69.8 71.9 75.4	73.3 71.4 73.8 74.9	72.8 75.4 75.5 79.6
1986 1987 1988 1989	61.9 65.1 68.4 69.1	65.8 68.5 73.1 72.9 70.9	86.9 89.9 98.5 104.3	76.3 77.8 81.0 83.9	76.9 77.2 79.9 83.7	77.9 80.2 85.3 88.4	79.6 81.5 84.8 88.9 90.8
1990 1991 1992 1993 1994 1995 1996 1997 1998	69.7 68.7 70.6 72.9 76.8 80.4 84.0 90.1 95.4	70.3 68.3 69.2 72.5 77.1 80.6 81.6 86.2 89.2	108.5 110.4 103.7 99.8 100.7 103.8 106.0 110.3 102.5 103.0	89.6 89.2 87.5 83.8 87.4 89.5 89.2 92.5 95.9 97.3	88.1 93.9 91.8 84.9 87.4 88.3 88.4 91.0 94.4	88.6 87.8 86.8 84.8 89.9 95.3 93.6 97.3 98.3	90.5 87.5 87.8 89.7 94.5 96.2 97.5 98.9 90.9
2000	103.7 100.1 100.0 101.3 103.8 107.2 109.7 111.3 108.8 98.2	102.6 98.4 100.0 100.1 101.7 103.7 102.9 102.6 97.2	108.4 101.3 100.0 103.0 108.0 109.6 114.2 117.6 113.6 88.3	101.0 101.8 100.0 98.9 100.2 100.3 101.6 102.8 100.4	100.8 101.1 100.0 100.5 103.6 107.1 113.3 120.1	102.4 101.3 100.0 99.4 99.3 101.8 104.0 100.5	103.2 101.7 100.0 99.3 100.4 99.1 99.2 99.5 96.4
2008: I	112.0 110.7 108.1 104.4	99.0 98.3 97.6 93.9	119.8 118.4 114.5 101.6	104.1 102.2 100.9 94.3	123.6 122.7 121.3 112.7	105.6 104.5 100.0 91.9	99.6 98.2 96.2 91.7
2009: I	99.1 96.4 98.0 99.7	87.7 84.5 83.8	79.1 85.7 92.0 96.3	87.7 87.0 89.6	98.2 97.6 101.2	83.2 80.6 84.1	87.1 86.6 85.8
	•		Consume	r prices (Index, 198	2-84=100)		
1982 1983 1984 1985 1986 1987 1988	96.5 99.6 103.9 107.6 109.6 113.6 118.3 124.0	94.9 100.4 104.7 108.9 113.5 118.4 123.2 129.3	98.0 99.9 102.1 104.2 104.8 105.0 105.7 108.1	91.7 100.3 108.0 114.3 117.2 121.1 124.3 128.7	97.0 100.3 102.7 104.9 104.7 105.0 106.3 109.2	87.8 100.7 111.5 121.8 128.9 135.0 141.9 150.8	95.4 99.8 104.8 111.1 114.9 119.7 125.6 135.4
1990 1991 1992 1993 1993 1995 1995 1996 1997	130.7 136.2 140.3 144.5 148.2 152.4 156.9 160.5 163.0 166.6	135.5 143.1 145.2 147.9 148.2 151.4 153.8 156.2 157.8 160.5	111.4 115.0 117.0 118.5 119.3 119.2 119.3 121.4 122.2 121.8	133.1 137.3 140.6 143.6 146.0 151.5 153.3 154.3	112.2 116.7 122.7 128.1 131.6 133.9 135.8 138.4 139.7 140.5	160.5 170.6 179.4 187.3 194.9 205.2 213.3 217.7 221.9 225.6	148.2 156.9 162.7 165.3 169.4 175.1 179.4 185.0 191.4
2000 2001 2002 2003 2004 2005 2006 2007 2008 2008 2009 9	172.2 177.1 179.9 184.0 188.9 195.3 201.6 207.342 215.303 214.537	164.9 169.1 172.9 177.7 181.0 185.0 188.7 192.7 197.3	121.0 120.0 119.0 118.7 118.7 118.3 118.6 118.7 120.3	155.2 157.8 160.3 163.4 166.9 170.4 173.4 176.3 178.9 184.0	140.5 145.3 147.4 148.9 151.4 153.7 156.2 159.7 163.9 164.5	231.3 237.8 243.6 250.1 255.7 260.7 266.2 271.1 280.1 282.3	200.0 203.7 207.0 213.0 219.3 225.6 232.8 242.7 252.4 251.1
2008:	212.100 216.757 219.278 213.075 212.015 214.263 215.718	194.0 198.0 200.0 197.1 196.4 198.1	119.2 120.2 121.4 120.5 119.0 119.0	182.1 184.7 185.0 184.1 183.3 184.3	162.7 163.9 165.1 164.1 164.0 164.3	276.7 279.9 282.6 281.4 280.8 282.3	248.0 253.0 255.4 253.2 247.8 249.7
III	215.718 216.152	198.3 198.6	118.7 118.1	184.2 184.7	164.7 164.9	282.9 283.2	251.9 254.8

See Note, Table B–51 for information on U.S. industrial production series.
 Prior to 1991 data are for West Germany only.
 All data exclude construction. Quarterly data are seasonally adjusted.

Note: National sources data have been rebased for industrial production and consumer prices.

Sources: As reported by each country, Department of Labor (Bureau of Labor Statistics), and Board of Governors of the Federal Reserve System.

TABLE B-109. Civilian unemployment rate, and hourly compensation, major industrial countries, 1982-2009

[Quarterly data seasonally adjusted]

Year or quarter	United States	Canada	Japan	France	Germany <sup>1</sup>	Italy	United Kingdom
			Civilian u	nemployment rate	(Percent) <sup>2</sup>		
1982	9.7 9.6 7.5 7.2 7.0 6.2 5.5 5.3 3.5 6.9 3.6 1.5 4.9 4.5 4.2 4.0 4.7 5.8	10.7 11.6 10.9 9.3 8.4 7.4 7.1 7.7 9.8 10.6 8.6 8.8 8.4 7.7 7.0 6.1	24 27 28 27 28 29 25 23 21 21 22 25 29 32 34 41 47 48	37.3 7.6 8.9 9.5 9.6 9.2 8.6 38.3 8.5 11.1 10.5 11.1 10.6 10.2 8.7 7.9 8.1	5.6 6.9 37.1 7.2 6.6 6.3 6.3 6.3 5.7 5.0 8.5 8.2 9.0 9.9 9.3 3.8,5 7.8 7.8 8.6	5.4 5.9 5.9 6.0 97.5 7.9 7.8 7.0 96.9 10.7 11.3 11.4 11.5 11.0	10.8 11.5 11.8 11.4 10.5 8.6 7.3 7.1 8.9 10.0 10.4 9.5 8.7 8.1 7.0 6.3 6.0 5.5 5.1
2002 2003 2004 2005 2006 2007 2008 2009	6.0 5.5 5.1 4.6 4.6 5.8 9.3	6.9 6.4 6.0 5.5 5.3 5.3	5.4 5.3 4.8 4.5 4.2 3.9 4.0	<sup>3</sup> 8.6 9.0 9.0 9.0 8.1 7.5	9.3 10.3 311.2 10.4 8.7 7.5	8.5 8.1 7.8 6.9 6.2 6.8	5.0 4.8 4.9 5.5 5.4 5.7
2008: I	5.0 5.3 6.0 6.9 8.2 9.3 9.7 10.0	5.2 5.3 5.6 6.7 7.5 7.8	3.9 4.1 4.1 4.5 5.3 5.5	7.2 7.4 7.5 8.0 8.7 9.7	7.8 7.6 7.4 7.4 7.7 8.0	6.6 6.9 6.8 7.1 7.4 7.6 7.9	5.3 5.4 5.9 6.4 7.1 7.8
		Manuf	acturing hourly cor	npensation in U.S. (	dollars (Index, 2002	=100) 4	
1982 1983 1984 1985 1986 1987 1989 1989 1990 1990 1991 1992 1993 1993 1995 1995 1995 1997	459 47.3 48.9 51.4 53.8 55.6 57.5 59.3 62.1 65.8 68.9 70.5 72.2 73.4 74.6 76.5 81.2 84.2	59.8 64.0 64.7 64.7 69.3 78.1 92.0 100.2 99.5 94.4 91.7 93.4 95.5 96.3	28.5 30.7 31.6 32.7 48.2 57.8 66.8 66.7 66.8 76.6 84.3 98.9 109.5 123.1 107.3 99.7 94.4	40.7 39.3 37.7 39.9 54.1 65.0 67.9 66.8 81.8 83.5 93.7 91.5 97.0 111.1 110.4 99.5 99.2	343 341 321 329 463 584 622 61.1 764 791 920 92.2 98.4 117.4 117.4 103.4 101.4	41.5 43.3 43.4 44.8 61.2 75.9 81.2 85.0 104.8 110.1 118.0 96.3 99.1 103.7 115.5 105.5 105.5	36.3 33.7 32.0 34.0 41.8 60.1 59.1 72.0 80.3 80.4 68.1 72.2 75.8 87.4.7 81.8 89.0
2000	91.3 94.8 100.0 108.0 108.9 112.5 114.7 119.6	99.6 98.1 100.0 116.6 130.0 145.7 160.4 175.4	103.9 102.3 100.0 105.7 114.3 113.2 106.1 104.5	89.6 89.2 100.0 122.5 138.9 144.1 151.1 169.4 187.3	92.4 92.4 100.0 122.4 135.3 137.1 144.0 159.9	91.9 92.0 100.0 124.2 141.2 145.9 150.2 167.5	91.4 90.7 100.0 114.1 133.7 140.4 149.3 167.5

<sup>&</sup>lt;sup>1</sup> Prior to 1991 data are for West Germany only.

Source: Department of Labor (Bureau of Labor Statistics).

<sup>&</sup>lt;sup>2</sup> Civilian unemployment rates, approximating U.S. concepts. Quarterly data for France, Germany, and Italy should be viewed as less precise indicators of unemployment under U.S. concepts than the annual data.

<sup>3</sup> There are breaks in the series for Canada (1994), France (1982, 1990, and 2003), Germany (1984, 1991, 1999, and 2005), Italy (1986, 1991, and 1993), and United States (1990 and 1994). For details, see International Comparisons of Annual Labor Force Statistics, Adjusted to U.S. Concepts, 10 Countries, 1970–2008, October 1, 2009, Appendix B, at http://www.bls.gov/fls/flscomparelf/notes.htm#country\_notes.

<sup>&</sup>lt;sup>4</sup> Hourly compensation in manufacturing, U.S. dollar basis; data relate to all employed persons (employees and self-employed workers). For details on manufacturing hourly compensation, see *International Comparisons of Manufacturing Productivity and Unit Labor Cost Trends*, 2008, October 22, 2009.

### TABLE B-110. Foreign exchange rates, 1988-2009

[Foreign currency units per U.S. dollar, except as noted; certified noon buying rates in New York]

		,	•				, ,				
Period	Australia (dollar) <sup>1</sup>	Canada (dollar)	China, P.R. (yuan)	EMU Members (euro) 1, 2	Germany (mark) <sup>2</sup>	Japan (yen)	Mexico (peso)	South Korea (won)	Sweden (krona)	Switzer- land (franc)	United Kingdom (pound) <sup>1</sup>
March 1973	1.2716	0.9967	2.2401		2.8132	261.90	0.013	398.85	4.4294	3.2171	2.4724
1988 1989	0.7841 .7919	1.2306 1.1842	3.7314 3.7673		1.7570 1.8808	128.17 138.07	2.273 2.461	734.52 674.13	6.1370 6.4559	1.4643 1.6369	1.7813 1.6382
1990 1991 1992 1993 1994 1995 1996 1997 1997 1998	.7807 .7787 .7352 .6799 .7316 .7407 .7828 .7437 .6291	1.1668 1.1460 1.2085 1.2902 1.3664 1.3725 1.3638 1.3849 1.4836 1.4858	4.7921 5.3337 5.5206 5.7795 8.6397 8.3700 8.3389 8.3193 8.3008 8.2783	1.0653	1.6166 1.6610 1.5618 1.6545 1.6216 1.4321 1.5049 1.7348 1.7597	145.00 134.59 126.78 111.08 102.18 93.96 108.78 121.06 130.99 113.73	2.813 3.018 3.095 3.116 3.385 6.447 7.600 7.918 9.152 9.553	710.64 736.73 784.66 805.75 806.93 772.69 805.00 953.19 1,400.40 1,189.84	5.9231 6.0521 5.8258 7.7956 7.7161 7.1406 6.7082 7.6446 7.9522 8.2740	1.3901 1.4356 1.4064 1.4781 1.3667 1.1812 1.2361 1.4514 1.4506 1.5045	1.7841 1.7674 1.7663 1.5016 1.5319 1.5785 1.5607 1.6376 1.6573 1.6172
2000	.5815 .5169 .5437 .6524 .7365 .7627 .7535 .8391 .8537 .7927	1.4855 1.5487 1.5704 1.4008 1.3017 1.2115 1.1340 1.0734 1.0660 1.1412	8.2784 8.2770 8.2771 8.2772 8.2768 8.1936 7.9723 7.6058 6.9477 6.8307	.9232 .8952 .9454 1.1321 1.2438 1.2449 1.2563 1.3711 1.4726 1.3935		107.80 121.57 125.22 115.94 108.15 110.11 116.31 117.76 103.39 93.68	9.459 9.337 9.663 10.793 11.290 10.894 10.906 10.928 11.143 13.498	1,130.90 1,292.02 1,250.31 1,192.08 1,145.24 1,023.75 954.32 928.97 1,098.71 1,274.63	9.1735 10.3425 9.7233 8.0787 7.3480 7.4710 7.3718 6.7550 6.5846 7.6539	1.6904 1.6891 1.5567 1.3450 1.2428 1.2459 1.2532 1.1999 1.0816 1.0860	1.5156 1.4396 1.5025 1.6347 1.8330 1.8204 1.8434 2.0020 1.8545 1.5661
2008: I	.9058 .9436 .8879 .6735	1.0039 1.0099 1.0411 1.2115	7.1590 6.9578 6.8375 6.8400	1.5007 1.5625 1.5030 1.3202		105.17 104.62 107.58 96.01	10.803 10.428 10.328 13.061	956.12 1,017.02 1,064.56 1,360.86	6.2668 5.9862 6.3175 7.7957	1.0670 1.0316 1.0734 1.1560	1.9790 1.9712 1.8924 1.5704
2009: I	.6644 .7609 .8332 .9090	1.2455 1.1682 1.0980 1.0557	6.8361 6.8293 6.8306 6.8271	1.3035 1.3619 1.4304 1.4762		93.78 97.42 93.54 89.88	14.384 13.315 13.261 13.062	1,415.27 1,282.78 1,237.55 1,166.70	8.4107 7.9239 7.2907 7.0114	1.1487 1.1123 1.0623 1.0219	1.4344 1.5502 1.6410 1.6335

Trade-weighted	valua	of tho	110	dollar

		Non	ninal	-	Real <sup>7</sup>				
	G-10 index (March 1973=100) <sup>3</sup>	Broad index (January 1997=100) <sup>4</sup>	Major currencies index (March 1973=100) <sup>5</sup>	OITP index (January 1997=100) <sup>6</sup>	Broad index (March 1973=100) <sup>4</sup>	Major currencies index (March 1973=100) <sup>5</sup>	OITP index (March 1973=100) <sup>6</sup>		
1988 1989	92.7 98.6	60.92 66.90	90.43 94.29	24.07 29.61	92.09 93.83	84.24 88.58	115.57 110.11		
1990 1991 1992 1993 1994 1995 1996 1997 1997	89.1 89.8 86.6 93.2 91.3 84.2 87.3 96.4 98.8	71.41 74.35 76.91 83.78 90.87 92.65 97.46 104.43 115.89 116.04	89.91 88.59 87.00 89.90 88.43 83.41 87.25 93.93 98.45 96.89	40.10 46.69 53.13 63.37 80.54 92.51 98.24 104.64 125.89 129.20	91.30 89.77 87.88 89.23 89.06 86.61 88.62 93.34 101.32 100.69	85.21 83.54 82.40 85.65 85.30 81.43 86.34 93.63 98.70 98.44	109.76 108.85 105.24 102.61 102.62 102.68 99.68 100.73 113.93 112.64		
2000 2001 2001 2002 2003 2004 2005 2006 2007 2007 2008		119.45 125.93 126.67 119.11 113.63 110.71 108.52 103.40 99.83 105.87	101.58 107.67 105.99 92.99 85.37 83.71 82.46 77.84 74.34 77.75	129.84 135.91 140.36 143.52 143.38 138.89 135.38 130.28 127.23 136.68	104.55 110.56 110.71 104.00 99.38 97.75 96.64 92.03 88.29 91.84	105.08 112.54 110.92 97.85 90.86 90.67 90.58 86.40 83.44 86.55	112.82 117.35 119.81 121.41 120.05 116.38 113.70 108.07 103.02 107.53		
2008: I		97.31 95.80 97.88 108.35	71.97 70.87 73.46 81.19	124.96 123.01 123.79 137.18	85.92 85.61 87.58 94.06	80.36 80.10 83.28 90.03	101.27 100.86 101.56 108.39		
2009: I		111.12 107.08 103.69 101.61	82.68 79.41 75.45 73.58	141.89 136.91 135.01 132.91	95.95 93.43 90.58 87.41	91.41 88.74 84.55 81.51	111.07 108.48 106.98 103.59		

<sup>1</sup> U.S. dollars per foreign currency unit.
2 European Economic and Monetary Union (EMU) members consists of Austria, Belgium, Cyprus (beginning in 2008), Finland, France, Germany, Greece (beginning in 2001), Ireland, Italy, Luxembourg, Malta (beginning in 2008), Netherlands, Portugal, Slovakia (beginning in 2009), Slovenia (beginning in 2007), and Spain.
3 G-10 index discontinued after December 1998.
4 Weighted average of the foreign exchange value of the dollar against the currencies of a broad group of U.S. trading partners.
5 Subset of the broad index. Consists of currencies of the Euro area, Australia, Canada, Japan, Sweden, Switzerland, and the United Kingdom.
6 Subset of the broad index. Consists of other important U.S. trading partners (OITP) whose currencies are not heavily traded outside their home markets.
7 Adjusted for changes in consumer price indexes for the United States and other countries.

Source: Board of Governors of the Federal Reserve System.

TABLE B-111. International reserves, selected years, 1972-2009

[Millions of special drawing rights (SDRs); end of period]

A	4070	1000	4000	0000	0007	0000	2009		
Area and country	1972	1982	1992	2002	2007	2008	October	November	
World <sup>1</sup>	151,995	368,041	760,933	1,893,634	4,123,167	4,563,431	5,102,935	5,101,008	
Advanced economies 1	113,362	214,025	557,602	1,142,317	1,564,042	1,648,376	1,892,898	1,904,061	
United States	12,112	29,918	52,995	59,160	46,820	52,396	86,925	86,149	
Japan	16,916 5,201	22,001 11,904	52,937 27,300	340,088 27,973	603,794 31,330	656,178 29,142	651,148 36,633	651,393 36,772	
United Kingdom Canada	5,572	3,439	8,662	27,973	25,944	28,426	35,303	34,964	
Euro area (incl. ECB) 1				195,771	148,621	154,221	192,634	191,281	
Austria	2,505	5,544	9,703	7,480	7,079	6,101	5,604	5,582	
Belgium Cyprus	3,564 294	4,757 490	10,914 764	9,010 2,239	6,827 3.888	6,306 416	10,533 478	10,415 483	
Finland	664	1,420	3,862	6,885	4,525	4.587	5.855	5,911	
France	9,224	17,850	22,522	24,268	31,855	24,630	31,246	31,436	
Germany	21,908	43,909	69,489	41,516	31,896	31,846	43,177	42,103	
Greece	950 1.038	916 2,390	3,606	6,083 3,989	526 499	350 572	1,068 1,259	1,092 1,207	
Ireland Italy	5.605	15,108	2,514 22,438	23,798	20.721	26,838	32,540	32,206	
Luxembourg			66	114	93	220	464	463	
Malta	253	999	927	1,625	2,396	239	359	356	
Netherlands	4,407	10,723	17,492	7,993	7,198	8,140	12,712	12,703	
Portugal Slovak Republic	2,130	1,179	14,474	8,889 6.519	1,226 11.450	1,281 11.631	1,990 477	1,919 476	
Slovenia			520	5,143	624	567	631	619	
Spain	4,567	7,450	33,640	25,992	7,582	8,376	11,508	11,385	
Australia	5,656	6,053	8,429	15,307	15,764	20,015	26,386	24,395	
China, P.R.: (Hong Kong)			25,589	82,308	96,593	118,468	150,964	159,103	
Denmark	787	2,111	8,090   364	19,924 326	20,663 1.634	26,347 2.284	46,378 2.241	47,382	
Iceland Israel	78 1.126	133 3,518	3,729	17.714	18.047	27,601	38.491	38,222	
Korea	485	2,556	12,463	89,272	165,908	130,607	166,139	168,205	
New Zealand	767	577	2,239	3,650	10,914	7,175	9,406	9,690	
Norway	1,220	6,272	8,725	23,579	38,500	33,079	30,692	30,648	
San Marino Singapore	1.610	7,687	29,048	135   60,478	410 103,121	459 113,092	115,941	117,315	
Sweden	1,453	3,397	16,667	12,807	17,281	16,967	28.126	27.680	
Switzerland	6,961	16,930	27,100	31,693	29,432	30,426	59,638	62,100	
Taiwan Province of China	957	7,866	60,333	119,381	171,532	189,864	215,097	216,099	
Emerging and developing economies	33,295	124,025	196,245	747,475	2,555,349	2,911,295	3,206,282	3,193,432	
By area:									
Africa	3,962	7,737	13,069	53,757	183,632 1,354,990	216,669	217,494	216,705	
Developing Asia China, P.R. (Mainland)	4,882	44,490 10,733	63,596   15.441	368,403 214,815	969,055	1,654,342 1,266,206	1,902,421 1,475,683	1,880,812	
India	1.087	4,213	4,584	50.174	169,356	161.036	172,402	168.291	
Europe	2,680	5,359	13,811	125,684	527,826	507,498	524,268	530,185	
Řussia			40.000	32,840	295,872	268,426	261,093	264,508	
Middle East Western Hemisphere	8,281 9,089	60,520 25,563	40,668 65,102	80,931 118,700	206,493 282,407	209,359 323,427	228,318 333,781	230,157 335,572	
Brazil	3.853	3,566	16,457	27.593	113,585	125,239	144.701	146,226	
Mexico	1,072	828	13,800	37,223	55,128	61,766	55,586	56,134	
Memoranda:									
Oil-exporting countries	9,915	69,941	40,923	131,309	620,884	632,376	620,963	628,044	
Non-oil developing countries	18,431	54,084	155,322	616,166	1,934,465	2,278,919	2,585,319	2,565,388	

Source: International Monetary Fund, International Financial Statistics.

Includes data for European Central Bank (ECB) beginning 1999. Detail does not add to totals shown.
 Note: International reserves consists of monetary authorities' holdings of gold (at SDR 35 per ounce), SDRs, reserve positions in the International Monetary Fund, and foreign exchange.
 U.S. dollars per SDR (end of period) are: 1.08570 in 1972; 1.10310 in 1982; 1.37500 in 1992; 1.35952 in 2002; 1.58025 in 2007; 1.54027 in 2008; 1.58989 in October 2009; and 1.61018 in November 2009.

TABLE B-112. Growth rates in real gross domestic product, 1991-2010 [Percent change]

				3 - 1							
Area and country	1991– 2000 annual average	2001	2002	2003	2004	2005	2006	2007	2008	2009 1	2010 <sup>1</sup>
World	3.1	2.3	2.9	3.6	4.9	4.5	5.1	5.2	3.0	8	3.9
Advanced economies	2.8	1.4	1.7	1.9	3.2	2.6	3.0	2.7	.5	-3.2	2.1
Of which: United States Japan United Kingdom Canada	3.4 1.2 2.5 2.9	1.1 .2 2.5 1.8	1.8 .3 2.1 2.9	2.5 1.4 2.8 1.9	3.6 2.7 3.0 3.1	3.1 1.9 2.2 3.0	2.7 2.0 2.9 2.9	2.1 2.3 2.6 2.5	.4 -1.2 .5 .4	-2.5 -5.3 -4.8 -2.6	2.7 1.7 1.3 2.6
Euro area <sup>2</sup>	2.1 2.0 1.6 2.9	1.9 1.2 1.8 1.8 3.6	.9 .0 1.1 .5 2.7	.8 2 1.1 .0 3.1	2.2 1.2 2.3 1.5 3.3	1.7 .7 1.9 .7 3.6	2.9 3.2 2.4 2.0 4.0	2.7 2.5 2.3 1.6 3.6	.6 1.2 .3 -1.0	-3.9 -4.8 -2.3 -4.8 -3.6	1.0 1.5 1.4 1.0 6
Memorandum: Newly industrialized Asian economies <sup>3</sup>	6.1	1.2	5.6	3.1	5.9	4.7	5.6	5.7	1.7	-1.2	4.8
Emerging and developing economies	3.6	3.8	4.8	6.2	7.5	7.1	7.9	8.3	6.1	2.1	6.0
Regional groups: Africa Central and eastern Europe Commonwealth of Independent States <sup>4</sup> Russia Developing Asia China India Middle East Western Hemisphere Brazil Mexico	2.4 2.0 7.4 10.4 5.6 4.0 3.3 2.5 3.5	4.9 .2 6.1 5.1 5.8 8.3 3.9 2.5 .7 1.3 2	6.5 4.4 5.2 4.7 6.9 9.1 4.6 3.8 .6 2.7	5.4 4.8 7.8 7.3 8.2 10.0 6.9 6.9 2.2 1.1	6.7 7.3 8.2 7.2 8.6 10.1 7.9 5.9 6.0 5.7 4.0	5.7 6.0 6.7 6.4 9.0 10.4 9.2 5.5 4.7 3.2 3.2	6.1 6.6 8.4 7.7 9.8 11.6 9.8 5.8 5.7 4.0 5.1	6.3 5.5 8.6 8.1 10.6 13.0 9.4 6.2 5.7 5.7 3.3	5.2 3.1 5.5 5.6 7.9 9.6 7.3 5.3 4.2 5.1	1.9 -4.3 -7.5 -9.0 6.5 8.7 5.6 2.2 -2.3 4 -6.8	4.3 2.0 3.8 3.6 8.4 10.0 7.7 4.5 3.7 4.7

<sup>&</sup>lt;sup>1</sup> All figures are forecasts as published by the International Monetary Fund. For the United States, advance estimates by the Department of Commerce show that real GDP fell 2.4 percent in 2009.

Sources: Department of Commerce (Bureau of Economic Analysis) and International Monetary Fund.

<sup>&</sup>lt;sup>2</sup> Euro area consists of: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovak Republic, Slovenia, and Spain.

<sup>3</sup> Consists of Hong Kong SAR (Special Administrative Region of China), Korea, Singapore, and Taiwan Province of China.
4 Includes Mongolia, which is not a member of the Commonwealth of Independent States but is included for reasons of geography and similarities in

Note: For details on data shown in this table, see World Economic Outlook and World Economic Outlook Update published by the International Monetary Fund.

