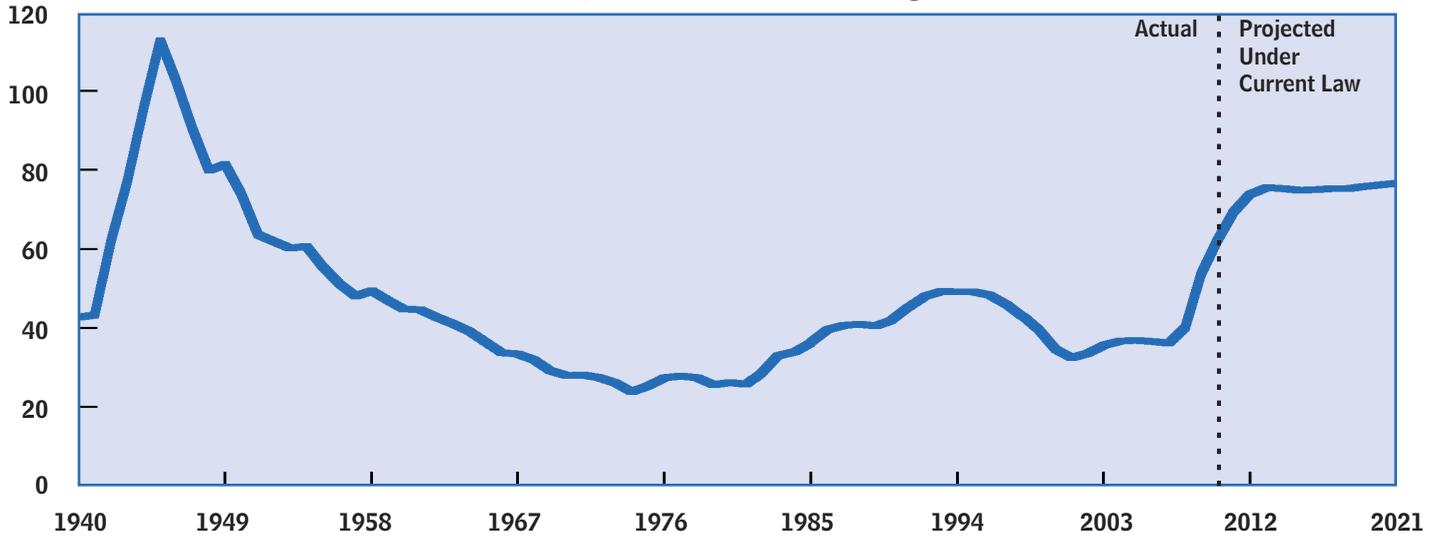


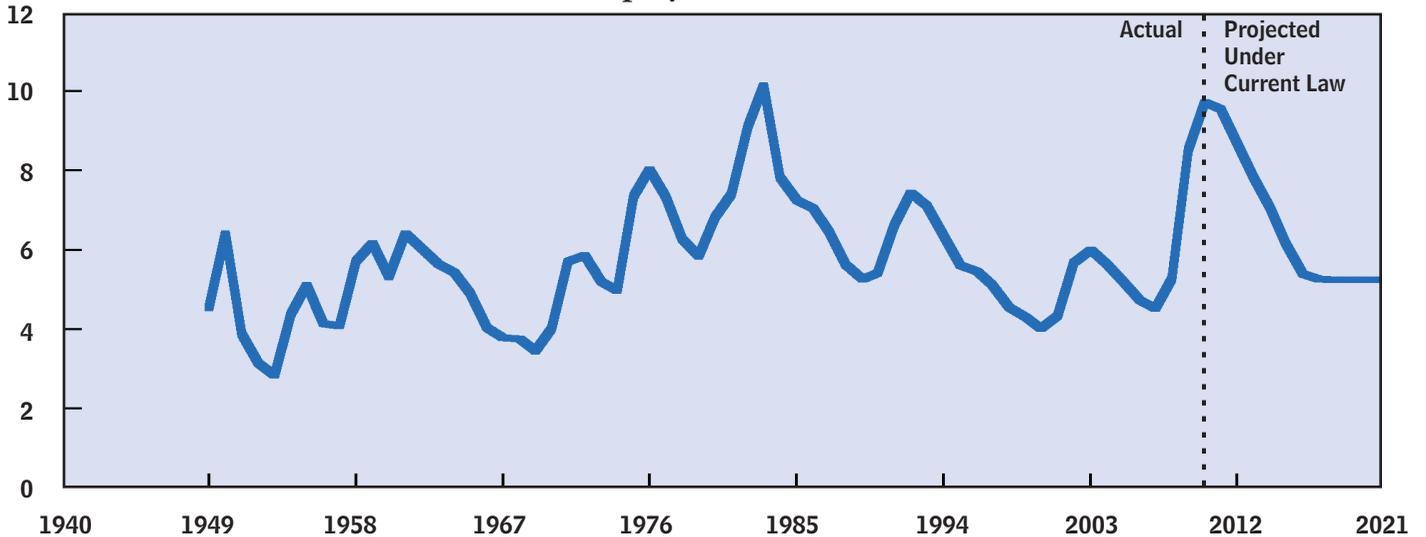
# CBO

## The Budget and Economic Outlook: Fiscal Years 2011 to 2021

Debt Held by the Public (Percentage of GDP)

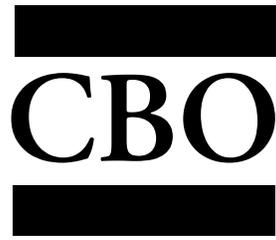


The Unemployment Rate (Percent)



JANUARY 2011





# **The Budget and Economic Outlook: Fiscal Years 2011 to 2021**

January 2011

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## Notes

The economic forecast was completed in early December 2010, and estimates of 2010 values are based, except when otherwise noted, on information that was available by that date.

Numbers in the text and tables may not add up to totals because of rounding.

Unless otherwise indicated, years referred to in describing the economic outlook are calendar years, and years referred to in describing the budget outlook are federal fiscal years (which run from October 1 to September 30).

Some of the figures have shaded bars that indicate the duration of recessions. (A recession extends from the peak of a business cycle to its trough.)

Supplemental data for this analysis are available on CBO's Web site ([www.cbo.gov](http://www.cbo.gov)).

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# Preface

**T**his volume is one of a series of reports on the state of the budget and the economy that the Congressional Budget Office (CBO) issues each year. It satisfies the requirement of section 202(e) of the Congressional Budget and Impoundment Control Act of 1974 that CBO submit to the Committees on the Budget periodic reports about fiscal policy and its baseline projections of the federal budget. In accordance with CBO’s mandate to provide objective, impartial analysis, the report makes no recommendations.

The baseline spending projections were prepared by the staff of CBO’s Budget Analysis Division under the supervision of Peter Fontaine, Theresa Gullo, Holly Harvey, Janet Airis, Tom Bradley, Kim Cawley, Jean Hearne, Jeffrey Holland, Sarah Jennings, Leo Lex, and Sam Papenfuss—with important contributions from the staff of the Health and Human Resources Division (supervised by Bruce Vavrichek, James Baumgardner, and Philip Ellis) and the Financial Analysis Division (supervised by Deborah Lucas and Damien Moore). The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Frank Sammartino, David Weiner, Mark Booth, and Janet Holtzblatt, with assistance from the staff of the Joint Committee on Taxation. The economic outlook was prepared by CBO’s Macroeconomic Analysis Division under the direction of Robert Dennis and Kim Kowalewski; Robert Arnold and Christopher Williams produced the economic forecast and projections. Altogether, this report is the result of work by more than 100 people at CBO—too many, unfortunately, to acknowledge in this preface. The analysts who developed the projections presented in this report are listed in Appendix F.

CBO’s Panel of Economic Advisers commented on an early version of the economic forecast underlying this report. Members of the panel are Henry J. Aaron, Richard Berner, Dan L. Crippen, Stephen J. Davis, Janice C. Eberly, Kristin J. Forbes, Robert E. Hall, Jan Hatzius, Douglas Holtz-Eakin, Simon Johnson, Anil Kashyap, Lawrence Katz, N. Gregory Mankiw, Laurence H. Meyer, Rudolph G. Penner, Adam S. Posen, James Poterba, Carmen M. Reinhart, Alice Rivlin, and Stephen P. Zeldes. Joseph Gagnon, Marcello Estevão, Prachi Mishra, and Petia Topalova attended the panel’s meeting as guests. Although CBO’s outside advisers provided considerable assistance, they are not responsible for the contents of this report.

Barry Blom wrote Chapter 1, with assistance from Jared Brewster. Charles Whalen wrote Chapter 2, with assistance from Kim Kowalewski and Robert Arnold. Christina Hawley Anthony wrote Chapter 3, with assistance from Jared Brewster, David Newman, and Santiago Vallinas. Mark Booth wrote Chapter 4, with assistance from Grant Driessen, Barbara Edwards, Pamela Greene, Kalyani Parthasarathy, and Joshua Shakin.

Amber Marcellino wrote Appendix A; Avi Lerner and Santiago Vallinas, Appendix B; and Jared Brewster, Appendix C. Stephanie Burns compiled Appendix D, Amber Marcellino compiled Appendix E, and Santiago Vallinas produced the glossary.

Christine Bogusz, Kate Kelly, Leah Mazade, John Skeen, and Sherry Snyder edited the report. Maureen Costantino designed the cover, and she and Jeanine Rees prepared the report for publication, with assistance from Allan Keaton. Monte Ruffin printed the initial copies, and Linda Schimmel handled the print distribution. The report is available on CBO's Web site ([www.cbo.gov](http://www.cbo.gov)).



Douglas W. Elmendorf  
Director

January 2011



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# Summary

**T**he United States faces daunting economic and budgetary challenges. The economy has struggled to recover from the recent recession, which was triggered by a large decline in house prices and a financial crisis—events unlike anything this country has seen since the Great Depression. During the recovery, the pace of growth in the nation's output has been anemic compared with that during most other recoveries since World War II, and the unemployment rate has remained quite high.

For the federal government, the sharply lower revenues and elevated spending deriving from the financial turmoil and severe drop in economic activity—combined with the costs of various policies implemented in response to those conditions and an imbalance between revenues and spending that predated the recession—have caused budget deficits to surge in the past two years. The deficits of \$1.4 trillion in 2009 and \$1.3 trillion in 2010 are, when measured as a share of gross domestic product (GDP), the largest since 1945—representing 10.0 percent and 8.9 percent of the nation's output, respectively.

For 2011, the Congressional Budget Office (CBO) projects that if current laws remain unchanged, the federal budget will show a deficit of close to \$1.5 trillion, or 9.8 percent of GDP (see Summary Table 1). The deficits in CBO's baseline projections drop markedly over the next few years as a share of output and average 3.1 percent of GDP from 2014 to 2021. Those projections, however, are based on the assumption that tax and spending policies unfold as specified in current law. Consequently, they understate the budget deficits that would occur if many policies currently in place were continued, rather than allowed to expire as scheduled under current law.

## The Economic Outlook

Although recent actions by U.S. policymakers should help support further gains in real (inflation-adjusted) GDP in 2011, production and employment are likely to stay well below the economy's potential for a number of years. CBO expects that economic growth will remain moderate this year and next. As measured by the change from the fourth quarter of the previous year, real GDP is projected to increase by 3.1 percent this year and by 2.8 percent next year (see Summary Table 2). That forecast reflects CBO's expectation of continued strong growth in business investment, improvements in both residential investment and net exports, and modest increases in consumer spending. It also includes the impact of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (referred to in this report as the 2010 tax act), enacted in December, which provides a short-term boost to the economy by reducing some taxes, extending unemployment benefits, and delaying an increase in taxes that would otherwise have occurred in 2011. CBO projects that inflation will remain very low in 2011 and 2012, reflecting the large amount of unused resources in the economy, and will average no more than 2.0 percent a year between 2013 and 2016.

The recovery in employment has been slowed not only by the moderate growth in output in the past year and a half but also by structural changes in the labor market, such as a mismatch between the requirements of available jobs and the skills of job seekers, that have hindered the reemployment of workers who have lost their job. Payroll employment, which declined by 7.3 million during the recent recession, gained a mere 70,000 jobs (or 0.06 percent), on net, between June 2009 and December 2010. (By contrast, in the first 18 months of past recoveries,

**Summary Table 1.**

**CBO's Baseline Budget Outlook**

	Actual,											Total		
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
<b>In Billions of Dollars</b>														
Total Revenues	2,162	2,228	2,555	3,090	3,442	3,651	3,832	4,075	4,275	4,489	4,712	4,963	16,570	39,084
Total Outlays	3,456	3,708	3,655	3,794	3,975	4,202	4,491	4,691	4,885	5,185	5,451	5,726	20,117	46,055
<b>Total Deficit (-) or Surplus</b>	<b>-1,294</b>	<b>-1,480</b>	<b>-1,100</b>	<b>-704</b>	<b>-533</b>	<b>-551</b>	<b>-659</b>	<b>-617</b>	<b>-610</b>	<b>-696</b>	<b>-739</b>	<b>-763</b>	<b>-3,547</b>	<b>-6,971</b>
On-Budget	-1,371	-1,548	-1,186	-792	-621	-641	-752	-706	-693	-768	-798	-808	-3,992	-7,765
Off-Budget <sup>a</sup>	77	68	86	88	87	90	94	90	82	73	59	45	445	794
Debt Held by the Public at the End of the Year	9,018	10,430	11,598	12,386	12,996	13,625	14,358	15,064	15,767	16,557	17,392	18,253	n.a.	n.a.
<b>As a Percentage of GDP</b>														
Total Revenues	14.9	14.8	16.3	18.8	19.9	20.1	20.0	20.3	20.4	20.5	20.7	20.8	19.1	19.9
Total Outlays	23.8	24.7	23.3	23.1	23.0	23.1	23.5	23.4	23.3	23.7	23.9	24.0	23.2	23.5
<b>Total Deficit</b>	<b>-8.9</b>	<b>-9.8</b>	<b>-7.0</b>	<b>-4.3</b>	<b>-3.1</b>	<b>-3.0</b>	<b>-3.4</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-3.2</b>	<b>-3.2</b>	<b>-3.2</b>	<b>-4.1</b>	<b>-3.6</b>
Debt Held by the Public at the End of the Year	62.1	69.4	73.9	75.5	75.3	74.9	75.0	75.2	75.3	75.8	76.2	76.7	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

a. Off-budget surpluses comprise surpluses in the Social Security trust funds as well as the net cash flow of the Postal Service.

employment rose by an average of 4.4 percent.) Consequently, the rate of unemployment has fallen by only a small amount: After climbing to 10.1 percent of the labor force during 2009, the unemployment rate declined only to 9.4 percent by December 2010. Other measures of labor market conditions suggest even more slack than does the unemployment rate. For example, almost 9 million workers who have wanted full-time work in the past two years have been employed only part time.

As the recovery continues, the economy will add roughly 2.5 million jobs per year over the 2011–2016 period, CBO estimates. However, even with significant increases in the number of jobs, a substantial reduction in the unemployment rate will take some time. CBO projects that the unemployment rate will gradually fall in the near term, to 9.2 percent in the fourth quarter of 2011, 8.2 percent in the fourth quarter of 2012, and 7.4 percent at the end of 2013. Only by 2016, in CBO's forecast, does it reach 5.3 percent, close to the agency's estimate of the natural rate of unemployment (the rate of unemployment arising from all sources except fluctua-

tions in aggregate demand, which CBO now estimates to be 5.2 percent).

For the period beyond 2016, CBO's economic projections are based on trends in the factors that underlie potential output, including the labor force, capital accumulation, and productivity. The projections therefore do not explicitly incorporate fluctuations resulting from the business cycle. In CBO's projections, growth of real GDP averages 2.4 percent annually from 2017 to 2021, a pace that matches the growth of potential GDP over those years. The unemployment rate averages 5.2 percent in that same period.

**The Budget Outlook**

The recovery now under way might be expected to lessen the budget imbalance in 2011 by increasing tax revenues and decreasing spending for certain income-support programs, such as unemployment compensation. However, revenue growth will be restrained by the slow and tentative pace of the recovery and by the 2010 tax act.

**Summary Table 2.****CBO's Economic Projections for Calendar Years 2010 to 2021**

	Estimated, 2010	Forecast		Projected Annual Average	
		2011	2012	2013–2016	2017–2021
<b>Fourth Quarter to Fourth Quarter (Percentage change)</b>					
Real GDP	2.5	3.1	2.8	3.4	2.4
PCE Price Index	1.4	1.2	1.3	1.7	2.0
Core PCE Price Index <sup>a</sup>	1.0	1.0	1.2	1.6	2.0
Consumer Price Index <sup>b</sup>	1.2 <sup>c</sup>	1.3	1.3	2.0	2.3
Core Consumer Price Index <sup>a</sup>	0.6 <sup>c</sup>	0.9	1.2	1.9	2.2
<b>Fourth Quarter Level (Percent)</b>					
Unemployment Rate	9.6 <sup>c</sup>	9.2	8.2	5.3 <sup>d</sup>	5.2 <sup>e</sup>
<b>Calendar Year Average</b>					
Interest Rates (Percent)					
Three-month Treasury bill rate	0.1 <sup>c</sup>	0.3	1.1	3.6	4.4
Ten-year Treasury note rate	3.2 <sup>c</sup>	3.4	3.8	4.7	5.4
Unemployment Rate (Percent)	9.6 <sup>c</sup>	9.4	8.4	6.4	5.2
Nominal GDP (Percentage change)	3.8	3.7	4.4	5.1	4.4

Sources: Congressional Budget Office (CBO); Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve.

Notes: Data for the fourth quarter of 2010 were not available when CBO's forecast was completed in early December. Numbers for gross domestic product (GDP) in the table for 2010 are therefore based on CBO's estimates made in early December. More recent estimates from other forecasters, based on additional data, suggest that growth of nominal and real (inflation-adjusted) GDP in the fourth quarter was higher than CBO estimated.

PCE = personal consumption expenditures.

- a. Excludes prices for food and energy.
- b. The consumer price index for all urban consumers.
- c. Actual value for 2010.
- d. Value for 2016.
- e. Value for 2021.

Moreover, outlays for many programs are projected to continue to grow and more than offset the decreases in spending (for unemployment compensation, for example) yielded by improving economic conditions.

The resulting federal budget deficit of nearly \$1.5 trillion projected for this year will equal 9.8 percent of GDP, a share that is nearly 1 percentage point higher than the shortfall recorded last year and almost equal to the deficit posted in 2009, which at 10.0 percent of GDP was the highest in nearly 65 years.

By CBO's estimates, federal revenues in 2011 will be \$123 billion (or 6 percent) more than the total revenues recorded two years ago, in 2009. The continued slow

improvement in economic conditions is anticipated to boost revenues from individual income taxes, corporate taxes, and other sources by nearly \$200 billion between those two years; however, revenues from social insurance taxes are projected to decline by more than \$70 billion relative to their level two years ago, mostly as a result of a one-year reduction in payroll taxes included in the 2010 tax act.

Spending, for the most part, has been growing faster than revenues. Programs related to the federal government's response to the problems in the housing and financial markets are an exception; outlays recorded for the Troubled Asset Relief Program (TARP), for example, will decrease by \$176 billion from 2009 to 2011, CBO

projects.<sup>1</sup> But if current laws remain unchanged, federal outlays other than those for the TARP are projected to be \$366 billion (or 11 percent) higher in 2011 than they were in 2009.

According to CBO's projections, mandatory spending excluding outlays for the TARP will increase by \$191 billion (or 10 percent) between 2009 and 2011.<sup>2</sup> Significant growth in many areas—in particular, for Social Security, Medicare, and Medicaid—is expected to be offset only partially by reductions in outlays for other programs, primarily for Fannie Mae, Freddie Mac, and deposit insurance. Discretionary spending will increase by an estimated \$137 billion over the two-year period; about one-third of that increase stems from funding provided by the American Recovery and Reinvestment Act of 2009 (ARRA). In addition, outlays for net interest will rise by an estimated \$38 billion from 2009 to 2011, mostly because of substantial increases in borrowing.

Under current law, CBO projects, budget deficits will drop markedly over the next few years—to \$1.1 trillion in 2012, \$704 billion in 2013, and \$533 billion in 2014. Relative to the size of the economy, those deficits represent 7.0 percent of GDP in 2012, 4.3 percent in 2013, and 3.1 percent in 2014. From 2015 through 2021, the deficits in the baseline projections range from 2.9 percent to 3.4 percent of GDP.

The deficits that will accumulate under current law will push federal debt held by the public to significantly higher levels. Just two years ago, debt held by the public was less than \$6 trillion, or about 40 percent of GDP; at the end of fiscal year 2010, such debt was roughly \$9 trillion, or 62 percent of GDP, and by the end of 2021, it is projected to climb to \$18 trillion, or 77 percent of GDP. With such a large increase in debt, plus an

expected increase in interest rates as the economic recovery strengthens, interest payments on the debt are poised to skyrocket over the next decade. CBO projects that the government's annual spending on net interest will more than double between 2011 and 2021 as a share of GDP, increasing from 1.5 percent to 3.3 percent.

CBO's baseline projections are not intended to be a forecast of future budgetary outcomes; rather, they serve as a neutral benchmark that legislators and others can use to assess the potential effects of policy decisions. Consequently, they incorporate the assumption that current laws governing taxes and spending will remain unchanged. In particular, the baseline projections in this report are based on the following assumptions:

- Sharp reductions in Medicare's payment rates for physicians' services take effect as scheduled at the end of 2011;
- Extensions of unemployment compensation, the one-year reduction in the payroll tax, and the two-year extension of provisions designed to limit the reach of the alternative minimum tax all expire as scheduled at the end of 2011;
- Other provisions of the 2010 tax act, including extensions of lower tax rates and expanded credits and deductions originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, and ARRA, expire as scheduled at the end of 2012; and
- Funding for discretionary spending increases with inflation rather than at the considerably faster pace seen over the dozen years leading up to the recent recession.

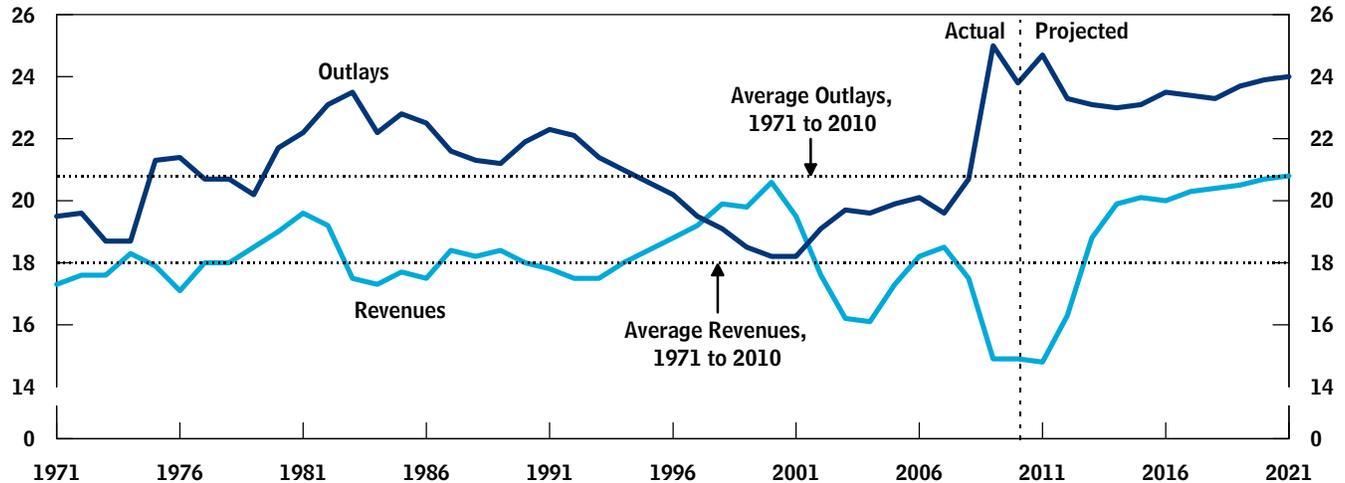
The projected deficits over the latter part of the coming decade are much smaller relative to GDP than is the current deficit, mostly because, under those assumptions and with a continuing economic expansion, revenues as a share of GDP are projected to rise steadily—from about 15 percent of GDP in 2011 to 21 percent by 2021 (see Summary Figure 1).

As a result, the baseline projections understate the budget deficits that would arise if many policies currently in place were extended, rather than allowed to expire as

1. The Administration recorded outlays of \$151 billion for the TARP in 2009, which reflected its estimate of the cost of the actions that had been undertaken by the Treasury. Because the financial system stabilized and many institutions repaid the assistance provided by the TARP earlier than expected, the Administration—following the standard procedures for federal credit programs—reduced the previously recorded cost by posting a large *negative* outlay (that is, a reduction in spending) in 2010. The program will again reduce the deficit in 2011, CBO estimates—showing negative outlays of \$25 billion, mostly reflecting a further adjustment to the estimated cost recorded in 2009.
2. Mandatory spending is governed by permanent law; in contrast, discretionary spending is controlled by annual appropriation acts.

**Summary Figure 1.****Total Revenues and Outlays**

(Percentage of gross domestic product)



Source: Congressional Budget Office. (Figure corrected on February 15, 2011.)

scheduled under current law. For example, if most of the provisions in the 2010 tax act that were originally enacted in 2001, 2003, and 2009 or that modified estate and gift taxation were extended (rather than allowed to expire on December 31, 2012), and the alternative minimum tax was indexed for inflation, annual revenues would average about 18 percent of GDP through 2021 (which is equal to their 40-year average), rather than the 19.9 percent shown in CBO's baseline projections. If Medicare's payment rates for physicians' services were held constant as well, then deficits from 2012 through 2021 would average about 6 percent of GDP, compared with 3.6 percent in the baseline. By 2021, the budget deficit would be about double the baseline projection, and with cumulative deficits totaling nearly \$12 trillion over the 2012–2021 period, debt held by the public would reach 97 percent of GDP, the highest level since 1946.

Beyond the 10-year projection period, further increases in federal debt relative to the nation's output almost

certainly lie ahead if current policies remain in place. The aging of the population and rising costs for health care will push federal spending as a percentage of GDP well above that in recent decades. Specifically, spending on the government's major mandatory health care programs—Medicare, Medicaid, the Children's Health Insurance Program, and health insurance subsidies to be provided through insurance exchanges—along with Social Security will increase from roughly 10 percent of GDP in 2011 to about 16 percent over the next 25 years.<sup>3</sup> If revenues stay close to their average share of GDP for the past 40 years, that rise in spending will lead to rapidly growing budget deficits and surging federal debt. To prevent debt from becoming unmanageable, policymakers will have to substantially restrain the growth of spending, raise revenues significantly above their historical share of GDP, or pursue some combination of those two approaches.

3. See Congressional Budget Office, *The Long-Term Budget Outlook* (June 2010, revised August 2010).



# The Budget Outlook

**T**he United States faces a daunting fiscal outlook, both for the next few years and for the long term. The Congressional Budget Office (CBO) projects that if current laws remain unchanged, the federal budget will show a deficit of close to \$1.5 trillion for fiscal year 2011, about \$200 billion more than the deficit recorded in 2010 (see Table 1-1). As a share of gross domestic product (GDP), this year's deficit will be 9.8 percent, nearly 1 percentage point higher than the shortfall recorded last year and almost equal to the deficit posted in 2009, which was 10.0 percent of GDP, the highest share in nearly 65 years.

The large deficits of the past two years and the sizable shortfall expected for this year reflect a combination of factors: an imbalance between revenues and spending that predated the recession, sharply lower revenues and elevated spending associated with the recent financial turmoil and severe drop in economic activity, and the costs of various federal policies implemented in response to those conditions. The government's response included the enactment in February 2009 of the American Recovery and Reinvestment Act of 2009 (ARRA, Public Law 111-5); aid for the financial, housing, and automotive sectors; and the expansion and extension of benefits paid to unemployed workers.

The growth of the economy now under way might be expected to lessen the budget imbalance in 2011 by increasing revenue collections and decreasing spending for certain income-support programs, such as unemployment insurance. (CBO's outlook for the economy is described in detail in Chapter 2.) However, revenue growth will be restrained by the slow and tentative pace of the economic recovery and by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312, referred to in this

report as the 2010 tax act), while growth in spending for many programs—resulting partly from the 2010 tax act and other legislation—is expected to more than offset decreases in spending caused by improvement in the economy this year.

The deficits projected in CBO's budgetary baseline drop markedly over the next few years—to 7.0 percent of GDP (or \$1.1 trillion) in 2012, 4.3 percent (or \$704 billion) in 2013, and 3.1 percent (or \$533 billion) in 2014. From 2015 through 2021, the deficits in the baseline range from 2.9 percent to 3.4 percent of GDP (see Figure 1-1). However, those projections are based not only on further expansion but also on the assumptions that sharp reductions in Medicare's payment rates for physicians' services take effect as scheduled at the end of 2011; that funding for discretionary programs increases with inflation (discretionary programs are those that are funded through annual appropriation acts); that extensions of unemployment compensation, the one-year reduction in the payroll tax, and the two-year extension of provisions designed to limit the reach of the alternative minimum tax (AMT) all expire as scheduled on December 31, 2011; and that other provisions of the 2010 tax act, including extensions of lower tax rates and expanded credits and deductions originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, and ARRA, expire as scheduled at the end of December 2012. The lower projected deficits as a share of GDP over the latter part of the coming decade occur mostly because revenues as a share of GDP are projected to rise steadily—from about 15 percent of GDP in 2011 to 21 percent by 2021—under those assumptions.

The accumulating deficits will significantly boost federal debt held by the public. Over the course of fiscal

**Table 1-1.****Projected Deficits and Surpluses in CBO's Baseline**

(Billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Total Revenues	2,162	2,228	2,555	3,090	3,442	3,651	3,832	4,075	4,275	4,489	4,712	4,963	16,570	39,084
Total Outlays	3,456	3,708	3,655	3,794	3,975	4,202	4,491	4,691	4,885	5,185	5,451	5,726	20,117	46,055
<b>Total Deficit</b>	<b>-1,294</b>	<b>-1,480</b>	<b>-1,100</b>	<b>-704</b>	<b>-533</b>	<b>-551</b>	<b>-659</b>	<b>-617</b>	<b>-610</b>	<b>-696</b>	<b>-739</b>	<b>-763</b>	<b>-3,547</b>	<b>-6,971</b>
Net Interest	197	225	264	325	394	459	527	592	646	697	751	792	1,969	5,447
Primary Deficit (-) or Surplus (Excluding net interest)	-1,097	-1,255	-836	-379	-139	-92	-132	-25	36	1	12	29	-1,577	-1,524
<b>Memorandum (As a Percentage of GDP):</b>														
Total Deficit	-8.9	-9.8	-7.0	-4.3	-3.1	-3.0	-3.4	-3.1	-2.9	-3.2	-3.2	-3.2	-4.1	-3.6
Primary Deficit (-) or Surplus	-7.6	-8.3	-5.3	-2.3	-0.8	-0.5	-0.7	-0.1	0.2	*	0.1	0.1	-1.8	-0.8
Debt Held by the Public at the End of the Year	62.1	69.4	73.9	75.5	75.3	74.9	75.0	75.2	75.3	75.8	76.2	76.7	n.a.	n.a.

Source: Congressional Budget Office.

Note: GDP = gross domestic product; \* = between zero and 0.05 percent of GDP; n.a. = not applicable.

year 2010, debt held by the public jumped from \$7.5 trillion to \$9.0 trillion. By the end of 2011, CBO projects, that figure will be \$10.4 trillion and, at 69 percent of GDP, the highest level since 1950. Under the assumptions of the baseline, debt held by the public is projected to continue its upward climb, reaching \$18.3 trillion (or 77 percent of GDP) by the end of 2021 (see Figure 1-2). With such a large increase, along with an anticipated rise in interest rates as the economic recovery strengthens, interest payments on the debt are expected to skyrocket. CBO projects that the government's yearly net interest spending will more than triple between 2011 and 2021 (from \$225 billion to \$792 billion) and more than double as a share of GDP (from 1.5 percent to 3.3 percent).<sup>1</sup>

Even excluding net interest payments, the deficit would total nearly \$1.3 trillion this year (or 8.3 percent of GDP), CBO estimates. Under the assumptions that are

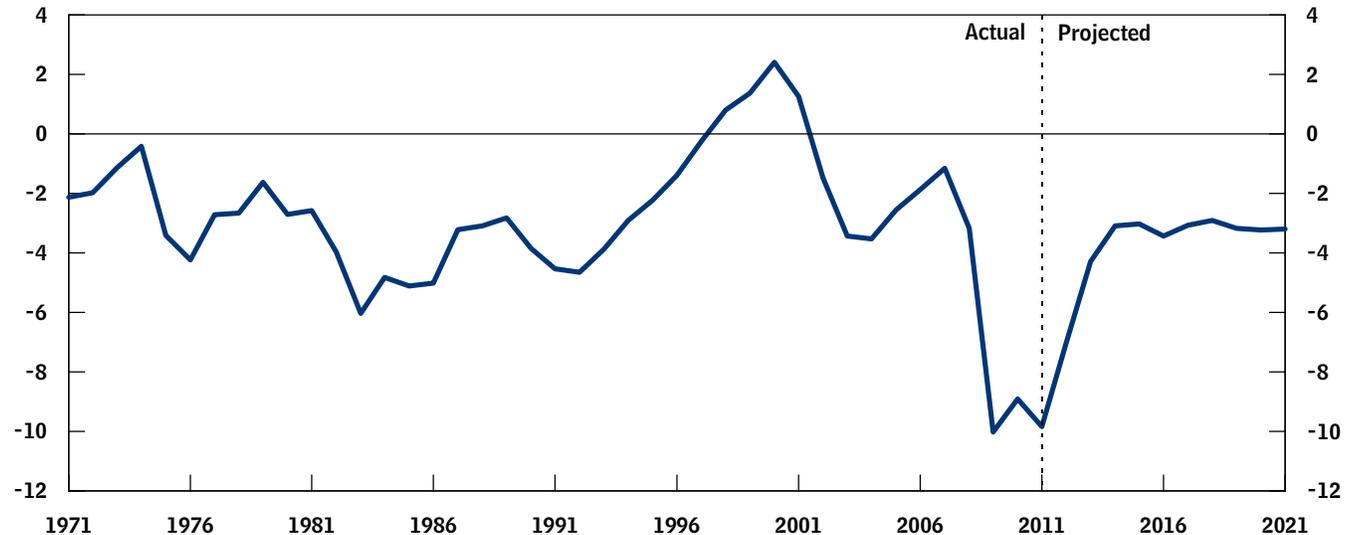
the basis for CBO's baseline, that so-called primary deficit would be close to zero from 2017 on, but large net interest payments—totaling more than \$5.4 trillion between 2012 and 2021—would require continued borrowing from the public and cause rising debt.

CBO's baseline projections are not intended to be a forecast of future budgetary outcomes; rather, they serve as a neutral benchmark that legislators and others can use to assess the potential effects of policy decisions. Future discretionary appropriations are likely to differ from those assumed in the baseline, and lawmakers will almost certainly enact changes to other spending and tax policies. Although CBO's baseline does not incorporate such potential changes, this chapter shows how some alternative policies would be expected to affect the budget over the next 10 years. For example, if most of the provisions in the 2010 tax act were extended (rather than allowed to expire on December 31, 2012) and the AMT was indexed for inflation, annual revenues would average about 18 percent of GDP from 2012 through 2021 (equal to their 40-year average) rather than the

1. In the federal budget, net interest consists primarily of the government's interest payments on debt held by the public, partly offset by interest income that the government receives from various sources.

**Figure 1-1.****Total Deficits and Surpluses**

(Percentage of gross domestic product)



Source: Congressional Budget Office.

19.8 percent shown in CBO's baseline projections.<sup>2</sup> If Medicare's payment rates for physicians' services were held constant as well, then deficits from 2012 through 2021 would average about 6 percent of GDP, compared with 3.6 percent in the baseline. With cumulative deficits during that decade of nearly \$12 trillion, under such alternative assumptions, debt held by the public would reach 97 percent of GDP by the end of 2021, the highest level since 1946.

Throughout the coming decade, spending on the government's health care and retirement programs will increasingly strain the federal budget. In CBO's baseline, total outlays for Medicare, Medicaid, the Children's Health Insurance Program (CHIP), and subsidies offered through new health insurance exchanges, are projected to

2. That particular alternative is based on the assumption that the lower tax rates, expanded credits, and higher deductions originally enacted in 2001, 2003, and 2009 and extended through 2012 by the 2010 tax act are made permanent. It also reflects the assumption that the new estate and gift tax rules for 2011 and 2012, also as established by the 2010 tax act, continue permanently beyond their currently scheduled 2012 expiration. Finally, this alternative incorporates an assumption that the higher exemption contained in the 2010 tax act for the AMT does not expire at the end of 2011 and that the exemption is indexed thereafter to inflation.

increase at an average rate of about 7 percent a year between 2012 and 2021—much more rapidly than nominal GDP. Moreover, as more baby boomers become eligible for Social Security retirement benefits, costs for that program also will grow faster than the economy for most of the coming decade.

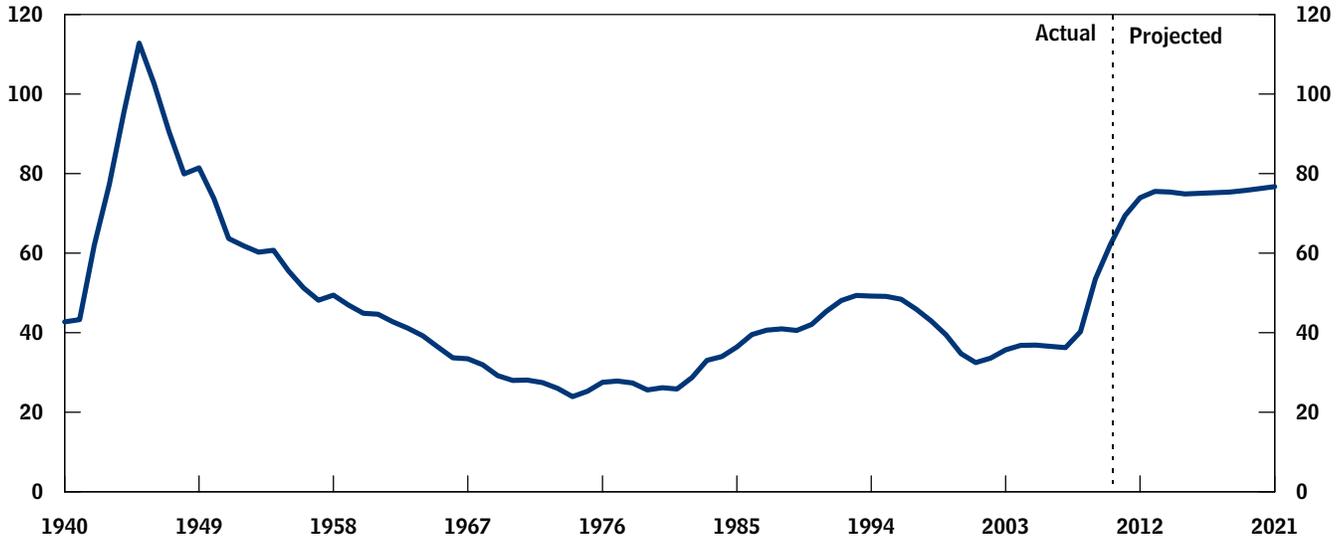
Those trends will persist after 2021. The share of the population age 65 or older will continue to rise rapidly. In addition, under current law, federal health care costs per beneficiary will probably keep growing much faster than GDP per capita—as they have for the past 40 years. As a consequence, the growth of spending for Medicare, Medicaid, and Social Security will remain rapid. To keep annual deficits and total federal debt from becoming unsustainable, lawmakers will need to increase revenues as a percentage of GDP significantly above historical levels, sharply decrease projected spending, or pursue some combination of the two approaches.

**Budget Trends, 2009–2011**

The budget deficit surged to \$1.4 trillion, or 10.0 percent of GDP, in 2009 and fell slightly in 2010 to \$1.3 trillion, or 8.9 percent of GDP. Under the assumptions of CBO's

**Figure 1-2.****Federal Debt Held by the Public**

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: Data are for debt held by the public at the end of the year.

baseline, the budget deficit in 2011 will increase and will be similar to that recorded in 2009, totaling \$1.5 trillion (or 9.8 percent of GDP). The annual deficits for 2009 through 2011 are the largest as a share of GDP since 1945.

The fluctuations in the deficit during this period result primarily from the budgetary impact of the Troubled Asset Relief Program (TARP). The Administration recorded outlays of \$151 billion for the TARP in 2009, which reflected its estimate of the cost of the activities undertaken by the Treasury during that year.<sup>3</sup> However, because the financial system stabilized and many institutions repaid the assistance provided by the TARP earlier than expected, the Administration reduced the previously recorded cost by \$115 billion, which—following the standard procedures for federal credit programs—was

3. In keeping with procedures specified in law, the TARP's outlays are recorded as the estimated present value of all future cash flows for the program, with an adjustment for market risk (risk that investors cannot protect themselves against by diversifying their portfolios). Present value is a single number that expresses a flow of current and future income, or payments, in terms of an equivalent lump sum received or paid today. For an analysis of the budgetary effects of the transactions made under the authority of the TARP, see Congressional Budget Office, *Report on the Troubled Asset Relief Program—November 2010*.

recorded as a *negative* outlay in 2010.<sup>4</sup> In total, the TARP reduced the federal deficit in 2010 by \$110 billion (new activities last year were assumed to cost about \$4 billion), thereby reducing outlays by a total of \$261 billion from 2009 to 2010. In 2011, CBO estimates, the program will again reduce the deficit—by \$25 billion, on net, mostly reflecting an additional adjustment to the estimated costs recorded in prior years. That outcome would yield a positive swing of \$85 billion in outlays from 2010 to 2011.

Excluding the effects of the TARP, the trend in the deficit is upward: The underlying imbalance grew from nearly \$1.3 trillion in 2009 to \$1.4 trillion in 2010, and CBO projects that it will grow to \$1.5 trillion this year. Given the improvement in the economy overall since 2009, why is the deficit in 2011 projected to exceed those recorded for the past two years? The short answer is that although outlays for some programs are projected to decrease relative to what was spent in 2009, spending increases in several other areas are projected to more than offset those declines in 2011; as a result, outlays in 2011, excluding

4. Under standard accounting for credit programs in the federal budget, the original subsidy calculation may be increased or decreased by a “credit reestimate” in subsequent years, based on updated valuations of the present-value costs of the cash flows associated with those credit programs.

those from the TARP, are estimated to be 11 percent greater than those in 2009. At the same time, growth in revenues was relatively slow in 2010 and is expected to continue to be restrained this year; projected revenues in 2011 are only 6 percent greater than receipts in 2009. The patterns of growth in spending and revenues can be explained in large part by the combination of economic conditions and policy responses.

### Revenues

CBO estimates that federal revenues will total \$2.2 trillion in 2011, or \$123 billion more than the total revenues recorded in 2009 (see Table 1-2). Revenues in 2011 are anticipated to equal 14.8 percent of GDP—the smallest share since 1950 and 0.1 percentage point lower than in 2009. With continued slow improvement in economic conditions and a temporary payroll tax reduction in effect, CBO projects that revenue gains (in dollar terms) in 2011 will be similar to those in 2010. Revenues grew by \$57 billion last year, and they are projected to increase by \$67 billion this year.

In 2010, increases in corporate revenues and in receipts from the Federal Reserve more than offset declines in individual income and social insurance taxes (sometimes called payroll taxes). As a result, total revenues rose by 2.7 percent (see Table 1-3).

Corporate income taxes grew by 38 percent, or \$53 billion, in 2010 because of stronger corporate profits resulting from improved economic conditions and the expiration in 2009 of legislation that allowed businesses to take higher depreciation charges. The increase of \$46 billion in “other revenues” was attributable in large part to a doubling of receipts from the Federal Reserve. That jump resulted from an expansion of the Federal Reserve’s portfolio and a shift in the composition of the portfolio toward riskier and higher-yielding investments, as the Federal Reserve sought to support the housing and financial markets and the broader economy.

Partially offsetting the increases in corporate revenues and receipts from the Federal Reserve in 2010 were decreases in individual income taxes and in social insurance taxes. Cumulatively, those collections fell by \$43 billion—a drop of about 2 percent overall from collections in 2009. That decline occurred early in the fiscal year and was largely attributable to lower tax liabilities incurred in 2009. During the final five months of fiscal year 2010, collections of withheld and nonwithheld taxes, which

were based on 2010 income, were 4 percent higher than they had been for the same period in 2009. (For more details about past and future revenues, see Chapter 4.)

Under the assumption that current laws remain unchanged, revenues in CBO’s baseline are projected to rise by 3.1 percent in 2011—a rate that is slower than that for the overall economy. As a result, in CBO’s projections, receipts as a share of GDP decline slightly, from 14.9 percent in 2010 to 14.8 percent in 2011. The overall growth (in dollar terms) in projected revenues stems largely from individual income taxes, which are expected to increase by nearly \$100 billion (or 11 percent) in 2011. In addition, CBO estimates that corporate income taxes will rise by \$9 billion in 2011. However, those sources of growth are partially offset by a \$46 billion (or 5 percent) decline in social insurance taxes, the result of a provision in the 2010 tax act that reduces the employee’s share of the payroll tax for 2011 only. (For a detailed discussion of the 2010 tax act and its budgetary effects, see Box 1-1 on page 8.)

### Outlays

If current laws remain unchanged, federal outlays in 2011 will total \$3.7 trillion (or 24.7 percent of GDP)—\$191 billion higher than they were two years ago, CBO estimates. Total mandatory outlays (that is, spending for programs, such as Social Security and Medicare, that are governed by permanent law) contribute only \$15 billion to the increase between 2009 and 2011, primarily because outlays recorded for the TARP have fallen sharply; meanwhile, mandatory outlays other than those for the TARP are expected to increase by \$191 billion between 2009 and 2011. Discretionary spending, which is projected to rise from \$1.24 trillion in 2009 to \$1.38 trillion this year (an increase of 11 percent) accounts for \$137 billion of the total increase in outlays. In addition, outlays for net interest will rise by an estimated \$38 billion. (For a more detailed discussion of spending programs, see Chapter 3.)

**Mandatory Outlays.** Not including the TARP, mandatory outlays in 2010 grew by 4 percent and are projected to rise by another 6 percent in 2011, CBO estimates—below the 8.8 percent average annual growth rate for such outlays between 2000 and 2009. Significant growth in many areas has been partially offset by reductions in outlays for other programs, primarily those related to the federal government’s response to turmoil in the housing and financial markets (see Figure 1-3 on page 10).

**Table 1-2.****Changes in Revenues, Outlays, and Deficits Between 2009 and 2011**

(Billions of dollars)

	Actual		Estimated, 2011	Change		
	2009	2010		2009 to 2010	2010 to 2011	2009 to 2011
<b>Revenues</b>						
Individual Income Taxes	915	899	998	-17	99	82
Corporate Income Taxes	138	191	201	53	9	63
Social Insurance Taxes	891	865	819	-26	-46	-72
Other Revenues <sup>a</sup>	161	207	211	46	4	50
<b>Total Revenues</b>	<b>2,105</b>	<b>2,162</b>	<b>2,228</b>	<b>57</b>	<b>67</b>	<b>123</b>
<b>Outlays</b>						
TARP	151	-110	-25	-261	85	-176
Mandatory Excluding TARP						
Medicare <sup>b</sup>	499	520	572	21	51	73
Medicaid	251	273	274	22	2	23
Social Security	678	701	727	23	27	50
Refundable tax credits	80	109	98	29	-11	18
Unemployment compensation	120	159	129	38	-30	9
SNAP	56	70	77	15	7	22
Veterans' income security <sup>b</sup>	46	49	67	3	18	21
Deposit insurance	23	-32	6	-55	39	-16
Fannie Mae and Freddie Mac	91	40	11	-51	-29	-80
Other <sup>b</sup>	98	130	170	31	40	72
Subtotal, Mandatory Excluding TARP	1,942	2,019	2,133	77	114	191
Discretionary						
Defense <sup>c</sup>	657	689	712	32	23	55
Nondefense	581	660	663	79	3	82
Subtotal, Discretionary	1,238	1,349	1,375	112	26	137
Net Interest	187	197	225	10	28	38
<b>Total Outlays</b>	<b>3,518</b>	<b>3,456</b>	<b>3,708</b>	<b>-62</b>	<b>252</b>	<b>191</b>
<b>Deficits</b>						
<b>Total Deficits</b>	<b>-1,413</b>	<b>-1,294</b>	<b>-1,480</b>	<b>119</b>	<b>-186</b>	<b>-67</b>
<b>Memorandum:</b>						
Outlays Excluding TARP	3,366	3,565	3,733	199	167	366
Deficit Excluding TARP	-1,261	-1,404	-1,504	-142	-101	-243
ARRA Revenues	-69	-169	*	-100	169	69
ARRA Outlays	114	226	148	112	-78	34

Source: Congressional Budget Office.

Note: TARP = Troubled Asset Relief Program; SNAP = Supplemental Nutrition Assistance Program; ARRA = American Recovery and Reinvestment Act of 2009; \* = between zero and \$500 million.

- Includes excise taxes, estate and gift taxes, customs duties, remittances from the Federal Reserve, and other miscellaneous receipts.
- Includes shifts of benefit payments from 2012 into 2011 because October 1, 2011, falls on a Saturday. Those shifts total \$15 billion for Medicare, \$5 billion for veterans' income security, and \$4 billion each for Supplemental Security Income and military retirement.
- Includes a shift in payments to military personnel from 2012 into 2011 totaling \$4 billion.

**Table 1-3.****Average Annual Rates of Growth in Revenues and Outlays Since 2000 and as Projected in CBO's Baseline**

(Percent)

	Actual		Projected		
	2000–2009	2010	2011	2012	2013–2021
<b>Revenues</b>					
Individual income taxes	0.4	-1.8	11.0	13.1	10.0
Corporate income taxes	-2.9	38.5	4.9	38.7	5.1
Social insurance taxes	3.8	-2.9	-5.3	15.2	5.2
Other revenues <sup>a</sup>	0.6	28.9	2.0	-3.0	7.1
<b>Total Revenues</b>	<b>1.4</b>	<b>2.7</b>	<b>3.1</b>	<b>14.6</b>	<b>7.7</b>
<b>Outlays</b>					
Mandatory <sup>b</sup>	8.8	-8.8	10.4	-3.3	5.6
Discretionary <sup>c</sup>	8.0	9.0	1.9	-1.7	1.9
Net interest	-2.0	5.4	14.1	17.5	13.0
<b>Total Outlays</b>	<b>7.5</b>	<b>-1.8</b>	<b>7.3</b>	<b>-1.4</b>	<b>5.1</b>
<b>Total Outlays Excluding Net Interest</b>	<b>8.5</b>	<b>-2.2</b>	<b>6.9</b>	<b>-2.7</b>	<b>4.3</b>
<b>Memorandum:</b>					
Consumer Price Index	2.6	1.7	1.6	1.3	2.1
Gross Domestic Product	4.4	2.9	3.6	4.4	4.7

Source: Congressional Budget Office.

- Includes excise taxes, estate and gift taxes, customs duties, remittances from the Federal Reserve, and other miscellaneous receipts.
- Includes offsetting receipts (funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are recorded as offsets to outlays).
- When constructing its baseline, CBO uses the employment cost index for wages and salaries to inflate discretionary spending related to federal personnel and the gross domestic product price index to adjust other discretionary spending.

Combined outlays for the federal government's three largest mandatory programs—Social Security, Medicare, and Medicaid—will be \$146 billion (or 10 percent) higher in 2011 than they were in 2009. Outlays for Medicare (excluding offsetting receipts) increased by \$21 billion, or 4.3 percent, in 2010, a slower rate of growth than in recent years. Although the explanation for the slowdown is not entirely clear, the evidence suggests that it can be attributed mostly to a drop in spending per enrollee for services provided or ordered by physicians. In addition, provisions of law that prevented a steep drop in payment rates for physicians expired several times in 2010, and the submission and processing of claims probably slowed in response. Medicare outlays will increase by 9.8 percent in 2011, CBO estimates, in part because of a shift in the timing of some benefit payments from 2012 into 2011.<sup>5</sup>

Medicaid spending in 2011 will have increased by \$23 billion since 2009, CBO estimates. In 2010, Medicaid spending grew by \$22 billion, or 9 percent—close to its average annual growth rate for the past decade. In 2011, outlays are projected to rise by just \$2 billion because the provisions of ARRA that boosted federal assistance to states for Medicaid in 2009 and 2010 have now expired, and subsequent legislation provides extra assistance that is at a lower rate than was provided under ARRA; furthermore, that additional assistance is scheduled to end in June 2011.

- Because October 1, 2011, falls on a weekend, some payments to providers that otherwise would have been made in 2012 will be shifted into 2011. Excluding the effect of those shifts, Medicare outlays in 2011 would grow by 7 percent, CBO estimates.

**Box 1-1.****The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010**

In December 2010, lawmakers enacted the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312, referred to in this report as the 2010 tax act). That legislation temporarily extended several tax provisions that affect individual income tax rates, credits, and deductions and the alternative minimum tax (AMT). It also reduced the employee's share of the Social Security payroll tax, modified other tax provisions, and extended benefits for long-term unemployed workers. The Congressional Budget Office (CBO) estimates that the act will increase the deficit by \$390 billion in 2011, by \$407 billion in 2012, and by \$120 billion in 2013, and that it will reduce deficits by \$59 billion between 2014 and 2020.<sup>1</sup>

Several provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Jobs and Growth Tax Relief Reconciliation Act of 2003, and the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) have been extended:

- The 10 percent tax bracket, which otherwise would have reverted to 15 percent, and the lower statutory tax rates of 25, 28, 33, and 35 percent for the highest four tax brackets, which would have otherwise risen to 28, 31, 36, and 39.6 percent;
- The expanded 15 percent tax bracket and the standard deduction for married couples, which was set to contract to less than twice the deduction for single taxpayers;
- The 15 percent top tax rate on long-term capital gains realizations and dividends, which would have reverted to 20 percent for capital gains and 39.6 percent for dividends;

- The postponement of the phaseout of itemized deductions and personal exemptions for higher-income taxpayers;
- The \$1,000 tax credit per child (maintained rather than dropping to \$500) and the expanded availability of that credit to taxpayers without tax liability; and
- The American Opportunity Credit (for certain post-secondary education expenses) and an expansion of the earned income tax credit.

Those extensions will increase deficits by \$403 billion between 2011 and 2014, according to estimates by CBO and the staff of the Joint Committee on Taxation.

EGTRRA began to reduce the estate tax in 2001 and eliminated it entirely in 2010. It also reduced tax rates on gifts through December 2010. Tax rates and effective exemption amounts for estate and gift taxes were to return to previously scheduled levels (a maximum rate of 55 percent and an exemption amount of \$1 million) on January 1, 2011. The 2010 tax act set the rates and effective exemption amounts for 2011 and 2012 at 35 percent and \$5 million (adjusted for inflation), lowering revenues, on net, by \$68 billion over the 2011–2020 period. Those lower rates and higher exemption amounts will expire on December 31, 2012.

The “AMT patch,” which increased the exemption amounts, was first enacted in 2001 to hold down the number of taxpayers affected. That provision expired most recently at the end of December 2009. The new tax legislation extended the patch through December 2011, at a cost of \$86 billion in fiscal year 2011 and \$68 billion in 2012. Because of effects on the timing of tax payments, the new provision is estimated to increase revenue by \$17 billion in 2013.

The employee's portion of the payroll tax for Social Security was reduced by 2 percentage points for calendar year 2011, reducing revenues by \$84 billion in 2011 and by \$28 billion in 2012, CBO estimates.

1. For a further discussion of the 2010 tax act's provisions, see Joint Committee on Taxation, *Technical Explanation of the Revenue Provisions Contained in the “Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010,” Scheduled for Consideration by the United States Senate*, JCX-55-10 (December 10, 2010), [www.jct.gov/publications.html?func=startdown&id=3716](http://www.jct.gov/publications.html?func=startdown&id=3716).

Continued

## Box 1-1.

Continued

## The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010

### Estimated Budgetary Effects of the 2010 Tax Act

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total, 2011- 2020
<b>Effect on Revenues</b>											
Tax Rates, Credits, and Deductions Initially Enacted in 2001, 2003, and 2009	-98	-147	-65	-16	0	0	0	0	0	0	-326
Relief from the Alternative Minimum Tax	-86	-68	17	0	0	0	0	0	0	0	-137
Reduction in Employee Payroll Tax Rate in 2011	-84	-28	0	0	0	0	0	0	0	0	-112
Increase in First-Year Depreciation	-55	-54	3	26	20	16	11	7	4	3	-21
Estate and Gift Taxes	-5	-28	-29	-3	-2	-1	*	*	*	*	-68
Other	-26	-20	-6	*	*	-1	-1	-1	-1	-1	-58
Subtotal, Revenues	-354	-346	-81	7	17	13	10	6	3	2	-721
<b>Effect on Outlays</b>											
Tax Rates, Credits, and Deductions Initially Enacted in 2001, 2003, and 2009	0	38	39	0	0	0	0	0	0	0	77
Extension of Unemployment Benefits	35	22	0	0	0	0	0	0	0	0	56
Other	2	1	*	0	0	0	0	0	0	0	3
Subtotal, Outlays	37	61	39	0	0	0	0	0	0	0	136
<b>Effect on the Deficit</b>											
<b>Total<sup>a</sup></b>	<b>-390</b>	<b>-407</b>	<b>-120</b>	<b>7</b>	<b>17</b>	<b>13</b>	<b>10</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>-858</b>

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Note: \* = between -\$500 million and \$500 million.

a. Negative numbers indicate an increase in the deficit; positive numbers indicate a decrease in the deficit.

As a result of the 2010 tax act, rather than deducting all such costs over several years, businesses were able to immediately deduct the full costs of their investment in business equipment beginning late in 2010 and continuing for all of 2011; half of the cost of such investments may be deducted in 2012. In all, the provision will reduce revenues by about \$55 billion in each of the next two years and increase revenues by nearly \$90 billion between 2013 and 2020. (Because it will allow companies to take depreciation deductions earlier, fewer deductions will be available for later years, thus increasing taxable income and raising businesses' income taxes.)

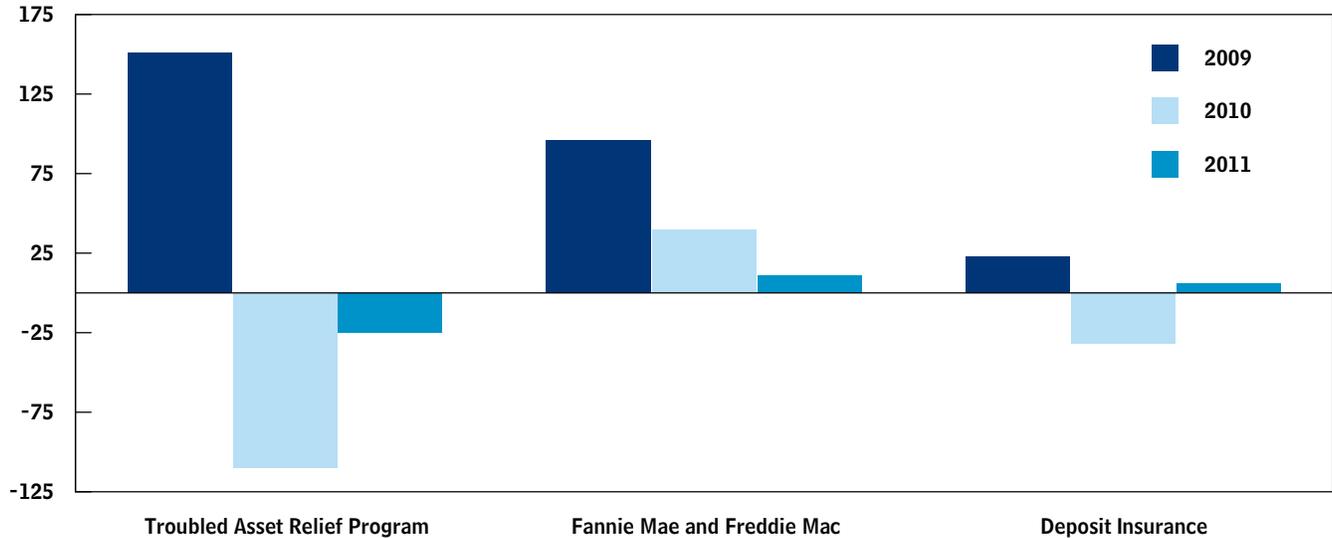
The 2010 tax act also extended for one or two years several provisions that either expired at the end of December 2009 or that were slated to expire at the end

of December 2010; most have been extended in the past: the research and experimentation tax credit, the exemption from current taxation of certain active financing income of foreign subsidiaries, tax credits for ethanol-blended motor fuels, and the deduction for state and local general sales taxes. Together, those provisions are projected to reduce revenues by a total of \$58 billion over the 2011–2020 period.

Emergency unemployment benefits for long-term unemployed workers were extended for one year (through calendar year 2011) by the legislation. Qualifying individuals will continue to be eligible for up to 99 weeks of benefits. CBO estimates that the extension will increase outlays by \$56 billion through 2012. Other changes increase outlays by \$3 billion over the next three years.

**Figure 1-3.****Outlays Recorded for Programs Involved in Financial Stabilization**

(Billions of dollars)



Source: Congressional Budget Office.

Note: Data for 2009 and 2010 are actual; data for 2011 are projected.

Social Security outlays rose by about \$23 billion (or 3 percent) in 2010 and are anticipated to rise by \$27 billion (or 4 percent) in 2011; such growth is below that of recent years, primarily because there was no cost-of-living adjustment (COLA) made either in January 2010 or in January 2011.

Outlays for refundable tax credits are expected to increase by \$18 billion over the period from 2009 to 2011.<sup>6</sup> Those outlays peaked at \$109 billion in 2010, an increase of \$29 billion from the year before. Most of the growth stemmed from the Making Work Pay and earned income tax credits. In 2011, outlays for refundable tax credits are expected to fall by \$11 billion, mostly because the credit for first-time homebuyers expired.

Outlays for unemployment benefits have been dramatically higher in each of the past three years than at any other point in the program's history. Spending for unemployment compensation peaked in 2010, reaching \$159 billion because of higher spending for emergency benefits and the part-year continuation of a \$25 weekly

supplement. CBO projects that outlays will fall by \$30 billion this year, primarily because the \$25 benefit was phased out last year and because claims for regular benefits are expected to decline as the economic recovery continues. At \$129 billion, projected outlays in 2011 will be \$9 billion more than the amount spent in 2009.

Other mandatory programs that have grown significantly since 2009 include the Supplemental Nutrition Assistance Program (up by \$22 billion) and veterans' compensation and pensions (up by \$21 billion).

Declines in spending for Fannie Mae, Freddie Mac, and deposit insurance will offset some of those increases. Cumulatively, such outlays fell from \$114 billion in 2009 to \$8 billion in 2010 and are expected to rise to \$18 billion in 2011. Outlays for Fannie Mae and Freddie Mac fell from \$91 billion in 2009 to \$40 billion in 2010, mostly because the two entities recognized fewer losses on their mortgage investments and guarantees. Under the assumptions of the baseline, that trend will continue in the current year, with outlays dropping to \$11 billion.<sup>7</sup>

6. Tax credits reduce a taxpayer's overall tax liability; if a refundable credit exceeds that liability, the excess may be refunded to the taxpayer, in which case it is recorded as an outlay in the budget.

Spending for deposit insurance in 2009 totaled \$23 billion; in 2010, the budget recorded \$32 billion in *negative* outlays for deposit insurance. The fluctuation occurred

for two main reasons. Insured institutions were required by the Federal Deposit Insurance Corporation to prepay premiums in 2010 that otherwise would have been received in calendar years 2011, 2012, and 2013, and some loans made in 2009 to support the corporate credit union system were repaid in 2010. Neither of those factors will be repeated in 2011, and CBO thus anticipates that net cash flows for deposit insurance will add \$6 billion to mandatory outlays this year.

Outlays for all other mandatory programs have increased by \$72 billion since 2009. Growth in spending for education programs, Supplemental Security Income, civilian and military retirement, and other health programs (not including Medicare and Medicaid) make up the majority of that increase.

**Discretionary Outlays.** Discretionary outlays grew rapidly in 2010, rising by \$112 billion (or 9 percent). Nearly 60 percent of that increase resulted from funding that lawmakers provided through ARRA, which by itself boosted discretionary outlays by \$65 billion from 2009 to 2010, nearly all for nondefense programs.<sup>8</sup> (For details about ARRA spending in 2009 and 2010 and projections through 2019, see Box 1-2.)

Spending for defense increased by about \$32 billion, or 5 percent, in 2010—well below the 9 percent average growth rate for the period from 2000 through 2009. About half of that increase resulted from spending for operations and maintenance and another one-quarter was for personnel costs. Those amounts include outlays for

military operations in Afghanistan and Iraq, which CBO estimates account for roughly 25 percent of the total increase in defense spending. (Funding for those operations is discussed in more detail in Box 3-2 on page 76.)

Nondefense discretionary outlays rose by \$79 billion (or 14 percent) from 2009 to 2010, driven in large part by funding provided by ARRA.<sup>9</sup> Such funding boosted outlays in 2010 by \$61 billion. The largest ARRA-related increases stem from the State Fiscal Stabilization Fund (a program to provide money to state and local governments, primarily for education), other education programs, and transportation programs.

Although discretionary programs are currently operating under a continuing resolution that, until March 4, 2011, holds funding mostly at 2010 levels, outlays will continue to rise, by CBO's estimate. (Under the rules that govern its baseline, CBO assumes full-year funding for 2011 based on amounts provided under the continuing resolution.) CBO estimates that discretionary outlays in 2011 will be \$26 billion (or about 2 percent) higher than in 2010. Most of the increase (\$23 billion) is in outlays for defense programs, mainly from previous appropriations for operations and maintenance.

CBO anticipates that nondefense discretionary outlays will edge up by \$3 billion. Nondefense outlays from ARRA-related funding will total \$73 billion in 2011, a drop of \$20 billion relative to 2010. But that decline is more than offset by increases in outlays for other nondefense discretionary programs, including international development, humanitarian aid, and security assistance (\$5 billion) and hospital and medical care for veterans (\$4 billion).

Excluding the effects of ARRA, all defense and nondefense discretionary outlays will grow by about 4 percent in 2011, CBO anticipates, well below average growth rates for the past decade. If final appropriations for 2011 differ from those assumed in the baseline, discretionary spending will rise or fall accordingly.

7. In 2010, the Treasury recorded \$40 billion in net outlays related to Fannie Mae and Freddie Mac. That amount includes cash infusions of nearly \$53 billion from the Treasury to the two entities (for purchases of their preferred stock), partly offset by about \$12 billion in dividends received on that stock. CBO's estimate of federal costs for Fannie Mae and Freddie Mac in 2011, \$11 billion, is an estimate of subsidy costs that reflects the projected net present value of transactions undertaken by the two entities in 2011. (Net cash infusions also are likely to be substantially lower in 2011 than in 2010.) For information about the methodology that CBO uses to construct its baseline estimates for Fannie Mae and Freddie Mac, see Congressional Budget Office, *CBO's Budgetary Treatment of Fannie Mae and Freddie Mac*, Background Paper (January 2010).

8. ARRA-related spending boosted mandatory outlays by \$47 billion in 2010 for programs such as Medicaid, unemployment compensation, refundable tax credits, and the Supplemental Nutrition Assistance Program.

9. In this report, spending generally refers to outlays, which are the disbursement of federal government funds. Funding (in the form of budget authority or obligation limitations) refers to the authority provided by law to incur financial obligations, which ultimately result in outlays.

**Box 1-2.****Updated Estimate of the Budgetary Effects of the American Recovery and Reinvestment Act of 2009**

In February 2009, lawmakers enacted the American Recovery and Reinvestment Act of 2009 (ARRA, Public Law 111-5) in response to significant weakness in the economy. Most of ARRA's effects on federal spending and revenues have already occurred, and they have been roughly in line with amounts originally estimated by the Congressional Budget Office (CBO) and the staff of the Joint Committee on Taxation (JCT). CBO estimates that about 70 percent of ARRA's direct budgetary impact had been realized by the end of fiscal year 2010 and that the direct effects of the law added \$579 billion to budget deficits in 2009 and 2010 (see the table). At the time ARRA was enacted, CBO and JCT estimated that it would increase deficits through 2010 by \$584 billion.<sup>1</sup>

In the initial analyses, which covered the projection period from 2009 through 2019, CBO and JCT projected that ARRA would increase deficits by \$787 billion. CBO has since revised some of its economic and technical assumptions concerning the law, and legislation enacted in 2010 rescinded some funds appropriated under ARRA and limited the period in which higher payments under the Supplemental Nutrition Assistance Program will be available. CBO now estimates that ARRA will have a direct cumulative impact on deficits over the 2009–2019 period of \$821 billion—\$34 billion more than originally projected (and about \$7 billion higher than CBO estimated in August 2010). Most of that upward revision occurs because the values of such economic variables as the unemployment rate and food prices are now

different from those that had been projected for the original estimates.

Many of ARRA's provisions have expired: The additional unemployment compensation provided in the law is no longer available (although other legislation has continued some benefits). Likewise, the increase in the federal share of Medicaid costs that was originally authorized by ARRA expired at the end of December 2010. (Recently enacted legislation continued enhanced matching rates through June 2011 but at a lower amount than authorized under ARRA.)<sup>2</sup> In addition, most of the discretionary funding provided by ARRA has been obligated, although outlays may occur in 2011 and later years (less than \$10 billion was available for obligation at the end of December 2010). Furthermore, many provisions that reduced revenues—such as the Making Work Pay tax credit, tax incentives for businesses, and temporary relief from the individual alternative minimum tax—have expired.

Although CBO expects that spending from ARRA will drop substantially over the next few years, the law will continue to have significant budgetary effects. In CBO's baseline, outlays from ARRA are estimated to total \$148 billion in 2011 (compared with estimated gross ARRA outlays of about \$226 billion in 2010 and \$114 billion in 2009).<sup>3</sup> The baseline includes another \$148 billion in

1. See Congressional Budget Office, cost estimate for the conference agreement for H.R. 1, the American Recovery and Reinvestment Act of 2009 (February 13, 2009). The cost estimate did not address ARRA's effects on the economy; for the most recent discussion of those effects see Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from July 2010 through September 2010* (November 2010).

2. The FAA Air Transportation Modernization and Safety Improvement Act (P.L. 111-226), enacted on August 10, 2010, provides for additional enhanced matching rates under Medicaid through June 2011 and for increased funding for elementary and secondary education. As with the extensions and expansions of unemployment insurance, the budgetary effects of those new provisions are not considered part of ARRA.

3. Some spending under ARRA was partially offset by reductions in the rate of spending of regular, non-ARRA funding for such programs as grants to states for highway construction, project-based rental assistance, and Pell grants.

Continued

## Box 1-2.

Continued

## Updated Estimate of the Budgetary Effects of the American Recovery and Reinvestment Act of 2009

### Estimated Effect of the Provisions of the American Recovery and Reinvestment Act of 2009

(Billions of dollars)

	Actual		Estimated, 2011	Total	
	2009	2010		2012-2019	2009-2019
<b>Outlays</b>					
Department of Health and Human Services programs					
Medicaid	32	40	12	6	89
Other	2	12	14	18	46
Refundable tax credits	3	38	35	5	81
Unemployment compensation <sup>a</sup>	28	33	*	1	62
Supplemental Nutrition Assistance Program	5	11	12	22	49
Department of Education programs					
State Fiscal Stabilization Fund	12	23	15	3	54
Other (Including Pell grants)	9	19	11	5	44
Department of Transportation programs	4	17	13	12	46
Department of Energy programs	1	7	9	21	38
Build America Bonds	*	1	4	33	38
Social Security	13	*	*	*	14
Other	7	24	23	20	75
<b>Total Outlays</b>	<b>114</b>	<b>226</b>	<b>148</b>	<b>148</b>	<b>637</b>
<b>Revenues</b>	<b>-69<sup>b</sup></b>	<b>-169<sup>b</sup></b>	<b>*</b>	<b>54</b>	<b>-184</b>
<b>Total Direct Effect on the Deficit</b>	<b>-183</b>	<b>-395</b>	<b>-148</b>	<b>-94</b>	<b>-821</b>

Sources: Congressional Budget Office; Department of the Treasury.

Notes: The numbers shown here for outlays include only spending directly resulting from ARRA. The effect on spending from regular appropriations or other authorizations (which may have been supplanted in any given year by funding from ARRA) is not included in this table. CBO estimates that the effect on the deficit in 2009 and 2010 was less than the amounts shown here because additional spending from ARRA was partly offset by reduced spending from regular appropriations.

\* = between zero and \$500 million.

a. Includes about \$3 billion in intragovernmental transfers, mostly in 2009, which the Administration recorded as outlays.

b. CBO's estimate of the extent to which ARRA reduced revenues in 2009 and 2010.

estimated outlays from 2012 through 2019.<sup>4</sup> Those figures include \$35 billion this year and \$5 billion over the next few years in outlays for refundable tax credits, \$36 billion in payments under the Build America Bond program (almost three-quarters of which is offset by higher revenues), \$34 billion for the Supplemental Nutrition Assistance Program, and

\$25 billion in outlays for transportation projects. Although ARRA substantially reduced revenues in 2009 and 2010, its net effect on revenues after 2011 will generally be to increase tax receipts, CBO anticipates. In particular, some of the tax savings that businesses received last year and this year because of ARRA will lead to higher tax payments in the future. For example, businesses that took advantage of provisions allowing more rapid depreciation of certain assets purchased in 2009 will have less remaining depreciation to deduct in the future.

4. ARRA's net budgetary effect in 2020 and 2021 will probably be less than \$1 billion per year, CBO estimates.

**Net Interest.** Outlays for net interest payments in 2011 will be \$38 billion above the amount recorded in 2009, CBO estimates. Although federal debt held by the public grew by \$1.5 trillion (or 20 percent) in 2010, net interest outlays rose by only \$10 billion (or 5 percent) last year. Growth in interest payments was restrained because interest rates remained low, which allowed for refinancing of maturing securities at low rates; also, inflation remained low, which limited the adjustment applied to inflation-indexed securities. In 2011, however, further substantial increases in borrowing will push interest outlays up by \$28 billion (or 14 percent), CBO estimates.

## CBO's Baseline Projections for 2012 to 2021

If various provisions contained in the 2010 tax act expire as scheduled and if other laws affecting spending and revenues remain unchanged, the budget deficit will shrink from 9.8 percent of GDP this year to 3.1 percent by 2014, CBO projects. That reduction reflects the scheduled expiration of those tax provisions, continued lessening in the budgetary impact of policies undertaken to provide economic stimulus, and improvements in the economy. Under those current-law assumptions, annual deficits are projected to fluctuate in a narrow range between 2.9 percent and 3.4 percent of GDP from 2014 through 2021 (see Table 1-4). Those deficits, as a share of GDP, are all higher than the average deficit of 2.8 percent of GDP for the past 40 years. As deficits accumulate, debt held by the public is projected to reach 77 percent of GDP by the end of 2021, the largest share since 1950.

Budgetary outcomes could be quite different, however. Suppose, for example, the following: first, that several current tax policies were allowed to continue rather than to expire on December 31, 2012 (including all of the policies in the 2010 tax act that either were originally enacted in 2001, 2003, and 2009 to reduce individual income tax rates and expand credits and deductions or that were enacted to modify estate and gift taxation; see Box 1-1 on page 8); second, that the AMT was indexed for inflation after December 2012; and third, that Medicare's payment rates for physicians stayed as they are now. Under that set of policies, the deficit would fluctuate between 5.3 percent and 6.6 percent of GDP from 2014 through 2021 and debt held by the public would total 97 percent of GDP by the end of 2021 (see Figure 1-4 on page 16 and Figure 1-5 on page 17).

## Revenues

In CBO's baseline projections, revenues rise rapidly between 2011 and 2014, as several significant tax provisions are scheduled to change and the economic recovery continues. Under those assumptions, revenues would rise by 15 percent next year, by 21 percent in 2013, and by another 11 percent in 2014. At that point, revenues would equal 19.9 percent of GDP, about 5 percentage points higher than in 2011 and nearly 2 percentage points higher than their 40-year average share of 18.0 percent.

The effects of scheduled changes in tax provisions account for about three-quarters of the projected increase in revenues relative to GDP over the next three years. The rest stems largely from the effects of continued improvement in the economy, which CBO expects will cause wages and salaries, capital gains realizations, and other taxable income to grow more rapidly than GDP.

In the baseline, revenues as a percentage of GDP increase from 2015 to the end of the projection period, reaching 20.8 percent in 2021. Virtually all of that increase comes from growth in receipts from individual income taxes, mainly because the structure of the income tax tends to cause revenues to rise faster than GDP over time.

## Outlays

CBO constructs its baseline in accordance with the provisions set forth in the (now expired) Balanced Budget and Emergency Deficit Control Act of 1985 and the Congressional Budget and Impoundment Control Act of 1974. Under the Deficit Control Act, projections for most mandatory programs are made under the assumption that current laws continue unchanged.<sup>10</sup> Thus, CBO's baseline projections for mandatory programs reflect expected changes in the economy, demographics, and other factors that affect the budgetary consequences of current laws

10. The Deficit Control Act provided some exceptions. For example, spending programs whose authorizations are set to expire are assumed to continue if they have outlays of more than \$50 million in the current year and were established on or before the enactment of the Balanced Budget Act of 1997. Programs established after that law was enacted are not automatically assumed to continue. The Deficit Control Act also required CBO to assume that expiring excise taxes dedicated to trust funds would be extended at their current rates. The law did not provide for the extension of other expiring tax provisions, even if they have been extended routinely in the past.

**Table 1-4.**  
**CBO's Baseline Budget Projections**

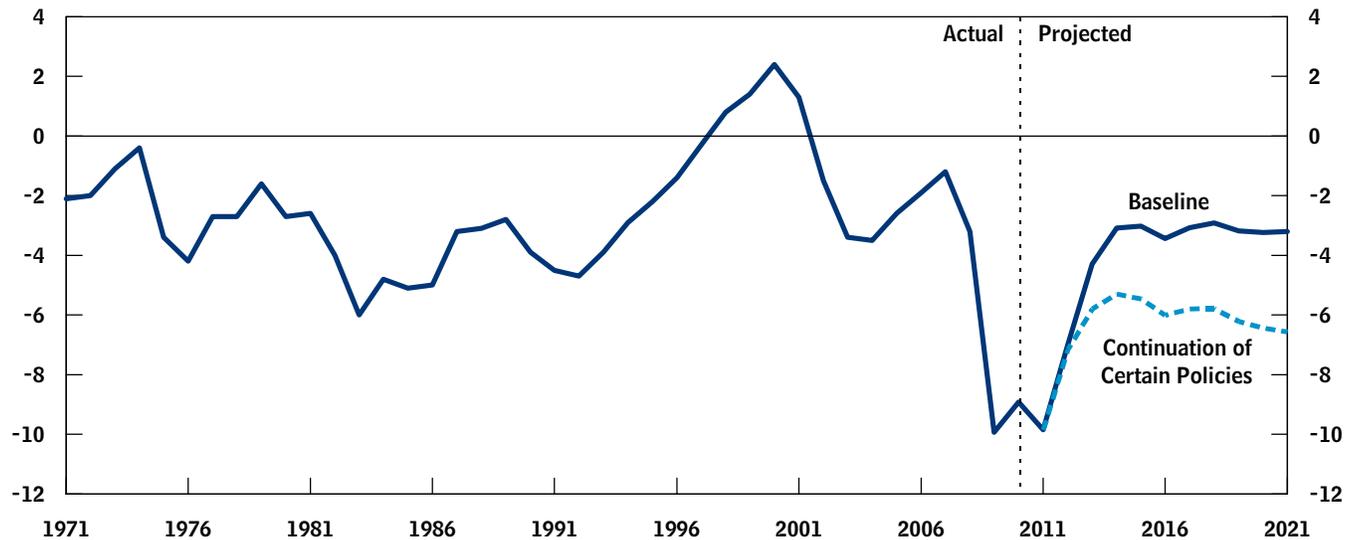
	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total		
												2012- 2016	2012- 2021	
<b>In Billions of Dollars</b>														
<b>Revenues</b>														
Individual income taxes	899	998	1,128	1,516	1,671	1,829	1,967	2,105	2,231	2,365	2,509	2,662	8,110	19,983
Corporate income taxes	191	201	279	343	428	398	370	413	417	420	420	437	1,817	3,923
Social insurance taxes	865	819	943	1,029	1,092	1,148	1,204	1,256	1,309	1,364	1,424	1,484	5,416	12,253
Other revenues	207	211	205	203	251	276	292	301	318	340	359	380	1,227	2,925
<b>Total Revenues</b>	<b>2,162</b>	<b>2,228</b>	<b>2,555</b>	<b>3,090</b>	<b>3,442</b>	<b>3,651</b>	<b>3,832</b>	<b>4,075</b>	<b>4,275</b>	<b>4,489</b>	<b>4,712</b>	<b>4,963</b>	<b>16,570</b>	<b>39,084</b>
On-budget	1,530	1,662	1,887	2,358	2,673	2,840	2,977	3,178	3,336	3,508	3,687	3,893	12,735	30,338
Off-budget	632	566	668	732	769	811	855	897	938	981	1,025	1,069	3,835	8,745
<b>Outlays</b>														
Mandatory spending	1,910	2,108	2,038	2,106	2,203	2,346	2,538	2,647	2,757	2,964	3,138	3,333	11,230	26,070
Discretionary spending	1,349	1,375	1,352	1,364	1,378	1,397	1,426	1,453	1,482	1,524	1,562	1,600	6,917	14,538
Net interest	197	225	264	325	394	459	527	592	646	697	751	792	1,969	5,447
<b>Total Outlays</b>	<b>3,456</b>	<b>3,708</b>	<b>3,655</b>	<b>3,794</b>	<b>3,975</b>	<b>4,202</b>	<b>4,491</b>	<b>4,691</b>	<b>4,885</b>	<b>5,185</b>	<b>5,451</b>	<b>5,726</b>	<b>20,117</b>	<b>46,055</b>
On-budget	2,901	3,210	3,073	3,150	3,294	3,481	3,730	3,884	4,029	4,276	4,485	4,702	16,727	38,103
Off-budget	555	498	581	644	682	721	761	807	856	909	966	1,024	3,390	7,952
<b>Deficit (-) or Surplus</b>	<b>-1,294</b>	<b>-1,480</b>	<b>-1,100</b>	<b>-704</b>	<b>-533</b>	<b>-551</b>	<b>-659</b>	<b>-617</b>	<b>-610</b>	<b>-696</b>	<b>-739</b>	<b>-763</b>	<b>-3,547</b>	<b>-6,971</b>
On-budget	-1,371	-1,548	-1,186	-792	-621	-641	-752	-706	-693	-768	-798	-808	-3,992	-7,765
Off-budget	77	68	86	88	87	90	94	90	82	73	59	45	445	794
Debt Held by the Public	9,018	10,430	11,598	12,386	12,996	13,625	14,358	15,064	15,767	16,557	17,392	18,253	n.a.	n.a.
<b>Memorandum:</b>														
Gross Domestic Product	14,513	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810	86,686	196,138
<b>As a Percentage of Gross Domestic Product</b>														
<b>Revenues</b>														
Individual income taxes	6.2	6.6	7.2	9.2	9.7	10.1	10.3	10.5	10.7	10.8	11.0	11.2	9.4	10.2
Corporate income taxes	1.3	1.3	1.8	2.1	2.5	2.2	1.9	2.1	2.0	1.9	1.8	1.8	2.1	2.0
Social insurance taxes	6.0	5.4	6.0	6.3	6.3	6.3	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.2
Other revenues	1.4	1.4	1.3	1.2	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.4	1.5
<b>Total Revenues</b>	<b>14.9</b>	<b>14.8</b>	<b>16.3</b>	<b>18.8</b>	<b>19.9</b>	<b>20.1</b>	<b>20.0</b>	<b>20.3</b>	<b>20.4</b>	<b>20.5</b>	<b>20.7</b>	<b>20.8</b>	<b>19.1</b>	<b>19.9</b>
On-budget	10.5	11.1	12.0	14.4	15.5	15.6	15.6	15.9	15.9	16.0	16.2	16.4	14.7	15.5
Off-budget	4.4	3.8	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.5
<b>Outlays</b>														
Mandatory spending	13.2	14.0	13.0	12.8	12.8	12.9	13.3	13.2	13.2	13.6	13.8	14.0	13.0	13.3
Discretionary spending	9.3	9.1	8.6	8.3	8.0	7.7	7.4	7.3	7.1	7.0	6.8	6.7	8.0	7.4
Net interest	1.4	1.5	1.7	2.0	2.3	2.5	2.8	3.0	3.1	3.2	3.3	3.3	2.3	2.8
<b>Total Outlays</b>	<b>23.8</b>	<b>24.7</b>	<b>23.3</b>	<b>23.1</b>	<b>23.0</b>	<b>23.1</b>	<b>23.5</b>	<b>23.4</b>	<b>23.3</b>	<b>23.7</b>	<b>23.9</b>	<b>24.0</b>	<b>23.2</b>	<b>23.5</b>
On-budget	20.0	21.4	19.6	19.2	19.1	19.1	19.5	19.4	19.2	19.6	19.7	19.7	19.3	19.4
Off-budget	3.8	3.3	3.7	3.9	4.0	4.0	4.0	4.0	4.1	4.2	4.2	4.3	3.9	4.1
<b>Deficit (-) or Surplus</b>	<b>-8.9</b>	<b>-9.8</b>	<b>-7.0</b>	<b>-4.3</b>	<b>-3.1</b>	<b>-3.0</b>	<b>-3.4</b>	<b>-3.1</b>	<b>-2.9</b>	<b>-3.2</b>	<b>-3.2</b>	<b>-3.2</b>	<b>-4.1</b>	<b>-3.6</b>
On-budget	-9.4	-10.3	-7.6	-4.8	-3.6	-3.5	-3.9	-3.5	-3.3	-3.5	-3.5	-3.4	-4.6	-4.0
Off-budget	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.5	0.4
Debt Held by the Public	62.1	69.4	73.9	75.5	75.3	74.9	75.0	75.2	75.3	75.8	76.2	76.7	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

**Figure 1-4.****Total Deficits and Surpluses—Historically, in CBO’s Baseline, and with a Continuation of Certain Policies**

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The projected deficit with the continuation of certain policies is based on several assumptions: First, that provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312) that originally were enacted in 2001, 2003, or 2009, or that modified estate and gift taxation do not expire on December 31, 2012, but instead continue; second, that the alternative minimum tax is indexed for inflation after 2011; and third, that Medicare’s payment rates for physicians are held constant at their 2011 level.

that govern those programs. For discretionary spending, CBO’s baseline projections assume that the most recent year’s budget authority, including any supplemental appropriations, is provided in each future year, with adjustments for projected inflation (as measured by specified indexes). Using that methodology, CBO projects total outlays that are relatively stable as a share of GDP over the next decade, ranging between 23.0 percent and 24.0 percent and well above the 20.8 percent of GDP that has been the average for the past 40 years.

Mandatory spending (including offsetting receipts) is projected to decline by 3 percent in 2012 and then to increase by 3 percent in 2013, in part because of a shift in the timing of certain benefit payments from 2012 into 2011. Without that shift, outlays would decrease by 1 percent in 2012—as spending from ARRA and unemployment insurance benefits drop markedly—and increase by 2 percent in 2013. For the rest of the baseline period, mandatory spending is projected to grow at an average rate of nearly 6 percent annually, reaching

14.0 percent of GDP in 2021, which is the same as the share projected for 2011.

Under the assumptions of the baseline, CBO projects that discretionary outlays will edge downward by 1.7 percent in 2012. Thereafter, because discretionary budget authority is assumed simply to keep pace with expected inflation, outlays are projected to grow at an average rate of 1.9 percent each year through 2021 (less than half the projected growth rate of nominal GDP). In stark contrast, discretionary spending grew by an average of 8.0 percent a year between 2000 and 2009 (faster than the growth rate of nominal GDP).

**Changes in CBO’s Baseline Since August 2010**

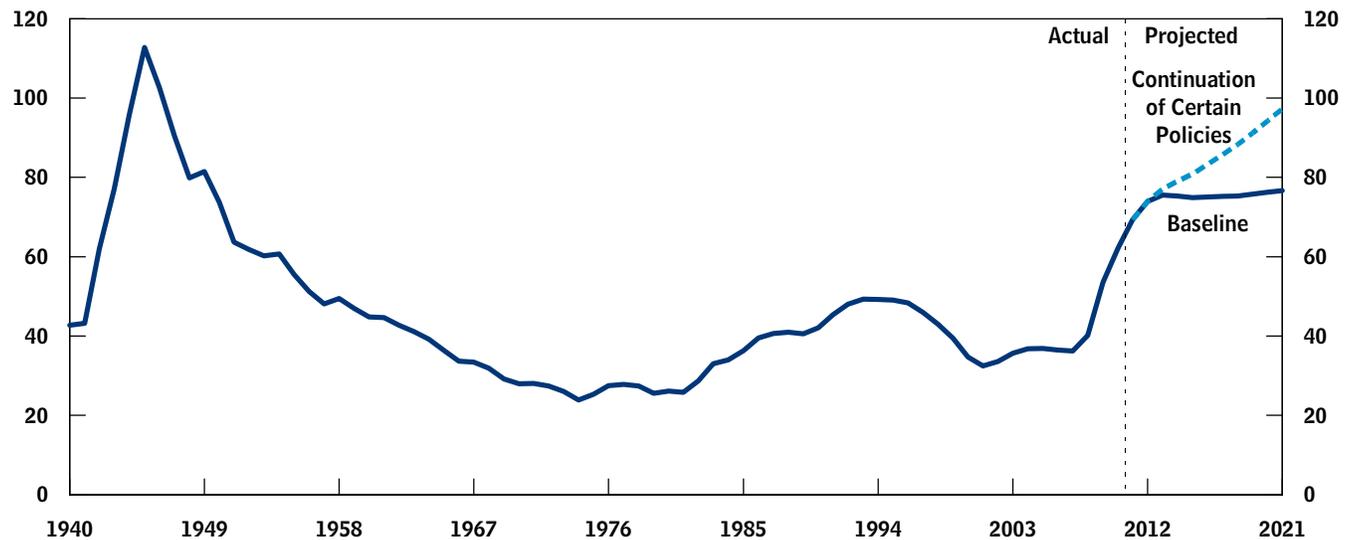
CBO’s current estimate of the deficit for 2011 is \$414 billion larger than its August 2010 estimate.<sup>11</sup>

11. See Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2010).

**Figure 1-5.**

## Federal Debt Held by the Public—Historically, in CBO’s Baseline, and with a Continuation of Certain Policies

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: The projected debt with the continuation of certain policies is based on several assumptions: First, that provisions of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312) that originally were enacted in 2001, 2003, or 2009, or that modified estate and gift taxation do not expire on December 31, 2012, but instead continue; second, that the alternative minimum tax is indexed for inflation after 2011; and third, that Medicare’s payment rates for physicians are held constant at their 2011 level.

Almost all of the change to the projected deficit is the result of the 2010 tax act (see Box 1-1 on page 8), which reduced revenues by \$354 billion and increased outlays by \$37 billion, relative to the August projections. In total, CBO’s revenue projections for this year are now \$419 billion less than those it issued in August; outlay projections are down by \$5 billion (see Table 1-5).

Since August, CBO also has added \$1.4 trillion to its baseline projection of the cumulative deficit for the 2011–2020 period; that figure represents about 3 percent of projected federal spending (or about 4 percent of projected federal revenues) during the decade. New legislation enacted since the August update was published accounts for nearly half of the increase (\$764 billion) over the 2011–2020 period and nearly all of the increase in 2011 and 2012; the 2010 tax act had the largest impact on the deficit over the projection period. On net, CBO projects that the tax act will reduce revenues by \$721 billion and increase outlays by \$136 billion through 2020.

Revisions to CBO’s outlook for the economy (see Chapter 2) account for nearly 40 percent (\$571 billion) of the change since August in projections of the deficit from 2011 through 2020. Economic changes reduce baseline revenues by \$958 billion over the period, largely as a result of two factors: Domestic corporate profits are expected to decline for the first half of the projection period, and nominal GDP is projected to be smaller, especially after 2012. The revisions to CBO’s forecast for GDP lead to lower estimates of taxable income—in particular, wages and salaries. Partially offsetting those lower revenues, baseline outlays have been reduced by \$387 billion, largely because of lower anticipated interest rates and thus net interest payments.

Technical factors (which include all factors that change budget projections that are not directly related to new legislation or to revisions in the economic outlook) have increased CBO’s projection of the 10-year deficit by \$106 billion. CBO lowered its revenue projections by \$213 billion, or 0.6 percent, for the projection period because of new information that affected its estimates of

**Table 1-5.****Changes in CBO's Baseline Projections of the Deficit Since August 2010**

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
											2011-2015	2011-2020
Total Deficit as Projected in August 2010	-1,066	-665	-525	-438	-507	-585	-579	-562	-634	-685	-3,202	-6,246
Changes												
Legislative												
Revenues	-409	-335	-68	16	49	-4	15	10	7	5	-746	-713
Outlays <sup>a</sup>	43	55	31	-9	-9	-4	-11	-16	-15	-15	112	51
Subtotal	-452	-390	-99	25	58	*	26	27	22	20	-858	-764
Economic												
Revenues	-11	-29	-82	-128	-129	-117	-120	-119	-113	-110	-379	-958
Outlays <sup>a</sup>	1	*	-3	-15	-40	-64	-69	-67	-66	-66	-57	-387
Subtotal	-12	-29	-79	-113	-88	-54	-51	-52	-47	-44	-323	-571
Technical												
Revenues	*	-34	5	-8	-12	-21	-22	-38	-45	-38	-49	-213
Outlays <sup>a</sup>	-50	-19	6	-1	1	-1	-9	-15	-9	-9	-63	-107
Subtotal	50	-15	-1	-7	-13	-21	-13	-23	-36	-30	15	-106
<b>Total Effect on the Deficit<sup>b</sup></b>	<b>-414</b>	<b>-434</b>	<b>-179</b>	<b>-95</b>	<b>-44</b>	<b>-74</b>	<b>-38</b>	<b>-48</b>	<b>-61</b>	<b>-54</b>	<b>-1,166</b>	<b>-1,441</b>
Total Deficit as Projected in January 2011	-1,480	-1,100	-704	-533	-551	-659	-617	-610	-696	-739	-4,368	-7,688

Source: Congressional Budget Office.

Note: More details about changes in CBO's projections since August 2010 are presented in Appendix A.

\* = between -\$500 million and \$500 million.

- a. Includes net interest payments.  
b. Negative numbers represent an increase in the deficit.

the amount of revenue that would be raised for a given rate of economic activity. Technical changes also led to a change in projected outlays through 2020 (down by \$107 billion), because of a decline in estimated net interest payments (down by \$116 billion) and in discretionary outlays (down by \$38 billion), partly offset by higher projected outlays for mandatory programs (up by \$47 billion). (Changes to CBO's baseline projections since August are described in greater detail in Appendix A.)

**Federal Debt Held by the Public**

Debt held by the public consists mostly of securities that the Department of the Treasury issues to raise cash to fund the federal government's activities and pay off its maturing liabilities.<sup>12</sup> The Treasury borrows money from the public by selling securities in the capital markets; that debt is purchased by various buyers in the United States as well as by private investors and central banks overseas.

12. A small amount of debt held by the public is issued by agencies other than the Treasury, mainly the Tennessee Valley Authority.

### Holders of Federal Debt

Domestic investors owned 53 percent (or \$4.8 trillion) of the \$9.0 trillion in federal debt held by the public at the end of 2010, and foreign investors held 47 percent (or \$4.3 trillion). The Federal Reserve System and individual households are the largest U.S. holders of Treasury debt, accounting for 12 percent and 9 percent of the total, respectively. Other investors in Treasury debt in the United States include pension and retirement funds, mutual funds, and state and local governments. Investors in China and Japan have the largest foreign holdings of Treasury securities.<sup>13</sup> Together, central banks and private entities in those two countries hold about 20 percent of U.S. public debt.<sup>14</sup>

### Trends in Debt Held by the Public

The amount of federal debt held by the public has varied markedly over the past few decades. After reaching nearly 50 percent of GDP in 1993, it dropped to 33 percent in 2001 as a result of several years of declining budget deficits and then surpluses (see Figure 1-2 on page 4). The surpluses and declining debt were short-lived, however, as deficits between 2002 and 2007 boosted debt held by the public by \$1.7 trillion; still, economic growth in that period kept debt as a percentage of GDP fairly steady, at around 37 percent.

In 2008, the United States experienced its most severe financial crisis since the Great Depression. The next year, federal revenues dropped sharply and outlays increased substantially, pushing the deficit to \$1.4 trillion. The budget deficit in 2010 was nearly \$1.3 trillion because of continued low revenues and elevated spending. Overall, in the three years between 2008 and 2010, the Treasury added nearly \$4 trillion to its outstanding borrowing, increasing debt held by the public as a percentage of GDP from 36 percent at the end of 2007 to 62 percent at the end of 2010. Under the assumptions of the baseline (in particular, that tax provisions expire as scheduled, that Medicare's payment rates to physicians drop sharply as scheduled, and that discretionary spending grows at the

rate of inflation), debt held by the public is projected to rise to 69 percent of GDP this year and 77 percent of GDP by 2021 (see Table 1-6). That amount of debt relative to GDP would be the highest recorded since 1950.

### Why Changes in Debt Held by the Public Do Not Equal Deficits

In many years, the amount of money the Treasury borrows by selling securities (net of the amount of maturing securities that it redeems) roughly equals the annual budget deficit. However, several factors—collectively labeled “other means of financing” and not directly included in budget totals—also affect the government's need to borrow from the public. Those factors include reductions (or increases) in the government's cash balance as well as the cash flows reflected in the financing accounts used for federal credit programs (including student loans, rural electrification and telecommunications programs, and lending by the Small Business Administration).

For 2010, federal borrowing was nearly \$180 billion more than the amount of the deficit, mainly because of borrowing to finance direct student loans, which require the government to disburse money up front in anticipation of later repayment. Those initial disbursements are not counted as budget outlays, which reflect only the programs' estimated subsidy costs.

In 2011, other means of financing are projected to reduce the Treasury's borrowing needs by \$68 billion. CBO estimates that the Treasury will reduce its cash holdings by \$235 billion this year, mainly as a result of the anticipated ending of the Supplementary Financing Program, which currently holds about \$200 billion in cash at the Federal Reserve.<sup>15</sup> At the same time, CBO projects that financing for student loans and other credit programs will add \$167 billion to borrowing needs over and above the budget deficit.

For each year from 2012 to 2021, CBO expects Treasury borrowing to be higher than the deficit, mainly because of the need to provide financing for credit programs. Because of such programs, CBO projects, the government's annual borrowing needs during that period will be

13. Information about foreign holders of Treasury debt should be viewed as approximate. In many cases, it is nearly impossible to accurately determine the home country of a foreign holder of U.S. securities because intermediaries can be involved in the management, purchase, and sale of securities.

14. For more detailed information on holders of public debt, see Congressional Budget Office, *Federal Debt and Interest Costs* (December 2010), Chapter 1.

15. The Treasury created the Supplementary Financing Program to help the Federal Reserve conduct monetary policy and stabilize the nation's financial system during the recent crisis. Funds for the program were raised through sales of Treasury bills and placed in an account at the Federal Reserve.

**Table 1-6.****CBO's Baseline Projections of Federal Debt**

(Billions of dollars)

	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Debt Held by the Public at the Beginning of the Year	7,545	9,018	10,430	11,598	12,386	12,996	13,625	14,358	15,064	15,767	16,557	17,392
Changes to Debt Held by the Public												
Deficit	1,294	1,480	1,100	704	533	551	659	617	610	696	739	763
Other means of financing	179	-68	68	84	77	78	74	90	93	94	97	98
<b>Total</b>	<b>1,473</b>	<b>1,412</b>	<b>1,168</b>	<b>788</b>	<b>610</b>	<b>629</b>	<b>733</b>	<b>706</b>	<b>703</b>	<b>790</b>	<b>835</b>	<b>862</b>
Debt Held by the Public at the End of the Year	9,018	10,430	11,598	12,386	12,996	13,625	14,358	15,064	15,767	16,557	17,392	18,253
<b>Memorandum:</b>												
Debt Held by the Public at the End of the Year as a Percentage of GDP	62.1	69.4	73.9	75.5	75.3	74.9	75.0	75.2	75.3	75.8	76.2	76.7
Debt Held by the Public Excluding Financial Assets <sup>a</sup>												
In billions of dollars	8,003	9,531	10,619	11,303	11,819	12,360	13,017	13,639	14,243	14,924	15,649	16,397
As a percentage of GDP	55.1	63.4	67.7	68.9	68.5	67.9	68.0	68.1	68.0	68.3	68.6	68.9

Source: Congressional Budget Office.

Note: GDP = gross domestic product.

- a. Subtracts from debt held by the public the value of financial assets (such as preferred stock) purchased from institutions participating in the Troubled Asset Relief Program, holdings of preferred stock in Fannie Mae and Freddie Mac, the Treasury's purchases of mortgage-backed securities, cash balances, and other financial instruments.

\$85 billion greater, on average, than the annual budget deficit would indicate.

**Uncertainty in Budget Projections**

Even if federal laws were unchanged for the next decade, actual budgetary outcomes would differ from CBO's baseline projections because of unanticipated changes in economic conditions and in a host of other factors that affect federal spending and revenues.

CBO's budget baseline depends on its economic projections for the coming decade, including the forecasts of such economic variables as interest rates, inflation, and the growth of real (inflation-adjusted) GDP. Discrepancies between those forecasts and actual economic conditions can make budgetary outcomes differ significantly from the baseline projections. For instance, CBO's baseline economic forecast anticipates that real GDP will grow by 2.7 percent in calendar year 2011, by 3.1 percent in 2012, and by an average of 2.8 percent annually from

2013 to 2021. If the actual growth rate of real GDP was 0.1 percentage point higher or lower each year, the cumulative deficit projected for the 2012–2021 period would be higher or lower by about \$310 billion. (For further discussion of how various economic assumptions affect budget projections, see Appendix B.)

Uncertainty also surrounds technical factors that affect CBO's baseline projections. For example, spending per enrollee in Medicare and Medicaid—which has generally grown faster than GDP—is hard to predict, but it will have a large effect on the costs of those two programs in coming years. If per capita costs grew 1 percentage point faster or slower per year over the next decade than CBO has projected, total outlays for Medicare and Medicaid would be about \$790 billion higher or lower over that period. As another example, CBO's baseline budget projections depend on forecasts of prices and crop yields for agricultural commodities, all of which are volatile and strongly affect how much the government will pay farmers under price- and income-support programs. In

addition, the Patient Protection and Affordable Care Act (P.L. 111-148) made broad changes to the nation's health care and health insurance systems. There are great uncertainties surrounding the potential budgetary impacts of those changes because they require assumptions about an array of technical, behavioral, and economic factors.

Projections of revenues are particularly sensitive to technical uncertainty. Forecasting the total amount of wages and salaries, corporate profits, and other income is part of CBO's economic projections, but forecasting the amount of revenue that the government will collect from a given amount of such income requires technical assumptions about the distribution of income and about many aspects of taxpayers' behavior. For example, such behavior determines the amount of many deductions and credits that taxpayers receive, and the amount of capital gains income that they realize from selling stocks. Differences between those assumptions and actual outcomes can lead to significant deviations from CBO's baseline revenue projections.

### Alternative Policy Assumptions

CBO's baseline budget projections are intended to show what would happen to federal spending, revenues, and deficits if current laws remain unchanged. Clearly, future legislative action could lead to markedly different budget outcomes. Moreover, in recent years, policymakers have enacted significant temporary changes to tax and spending laws, and they have extended much of that legislation—again, temporarily—when it expired. Well-known examples include many provisions of the 2001 and 2003 tax legislation, relief from the AMT, and delays in the scheduled cuts in Medicare's payment rates for physicians' services. As a result of those changes and extensions, baseline budget projections constructed on the assumption that current laws remain unchanged—and thus that temporary provisions expire as scheduled—have become less useful as indicators of the budgetary outcomes of maintaining current policies such as tax and payment rates.

To assist policymakers and analysts who have different views about the most useful benchmark for considering possible future changes in laws or policies, CBO estimated the effects on the budget baseline of some alternative assumptions about future policies. Examples include drawing down U.S. forces used in overseas contingency operations (including those in Afghanistan and Iraq) in

coming years, increasing or freezing future discretionary appropriations relative to the baseline path, maintaining current payment rates for physicians in the Medicare program, extending tax provisions beyond their scheduled expiration dates, and indexing the AMT for inflation (see Table 1-7). The discussion below focuses on how those policy actions would directly affect revenues and outlays. Such changes would also affect the projected costs of servicing the federal debt; those costs are shown separately in Table 1-7.

### War-Related Discretionary Spending

CBO's projections of discretionary spending for the next 10 years include outlays for operations in Afghanistan and Iraq and other potential overseas contingency operations. Specifically, the outlays projected in the baseline come from budget authority provided for those purposes in 2010 and earlier years; the budget authority provided for 2011 under the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (P.L. 111-322) at an annual rate of \$159 billion; and the \$1.8 trillion in appropriations projected for the 2012–2021 period (under the assumption that annual funding is set at \$159 billion plus adjustments for anticipated inflation, in accordance with the rules that govern CBO's baseline projections).

In coming years, the funding required for war-related activities—in Afghanistan, Iraq, or other countries—may eventually be smaller than the amounts in the baseline if the number of deployed troops and the pace of operations diminish. Thus, CBO formulated a budget scenario that assumes a reduction in the deployment of U.S. forces abroad for military actions. Many other scenarios—some costing more and some less—also are possible.

In 2010, CBO estimates, the number of U.S. active-duty, reserve, and National Guard personnel deployed for war-related activities averaged about 215,000. Under the alternative scenario, the average number of military personnel deployed for war-related purposes would decline over five years: from 180,000 in 2011 to 130,000 in 2012, 100,000 in 2013, 65,000 in 2014, and 45,000 in 2015 and thereafter. (Those numbers could represent various allocations among Afghanistan, Iraq, and other countries.) Under that scenario, total discretionary outlays for the period from 2012 through 2021 would be \$1.1 trillion less than the amount in CBO's current baseline.

**Table 1-7.****Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline**

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total		
												2012-	2012-	
												2016	2021	
<b>Policy Alternatives That Affect Discretionary Outlays</b>														
Reduce the Number of Troops Deployed for Certain Types of Overseas Military Operations to 45,000 by 2015 <sup>a</sup>														
Effect on the deficit <sup>b</sup>	0	21	54	87	113	129	137	142	147	150	153	404	1,134	
Debt service	0	*	2	4	9	15	23	32	41	50	61	31	237	
Increase Discretionary Appropriations at the Rate of Growth of Nominal GDP <sup>c</sup>														
Effect on the deficit <sup>b</sup>	0	-19	-45	-80	-121	-164	-202	-238	-274	-311	-351	-429	-1,804	
Debt service	0	*	-1	-4	-8	-16	-26	-39	-54	-71	-91	-30	-311	
Freeze Discretionary Appropriations at the Level Provided for 2011														
Effect on the deficit <sup>b</sup>	0	13	32	57	84	113	146	181	219	256	294	299	1,395	
Debt service	0	*	1	3	6	11	18	28	39	53	70	21	229	
<b>Policy Alternative That Affects Mandatory Outlays</b>														
Maintain Medicare's Payment Rates for Physicians at the 2011 Level														
Effect on the deficit <sup>b</sup>	0	-12	-19	-19	-21	-24	-25	-28	-31	-34	-36	-95	-249	
Debt service	0	*	-1	-1	-2	-4	-5	-7	-9	-11	-13	-8	-53	
<b>Policy Alternatives That Affect the Tax Code<sup>d</sup></b>														
Extend Certain Income Tax and Estate and Gift Tax Provisions Scheduled to Expire on December 31, 2012 <sup>e</sup>														
Effect on the deficit <sup>b</sup>	0	-2	-118	-245	-276	-287	-297	-306	-314	-323	-333	-929	-2,502	
Debt service	0	*	-2	-9	-21	-36	-53	-71	-91	-112	-134	-68	-530	
Index the AMT for Inflation <sup>f</sup>														
Effect on the deficit <sup>b</sup>	0	-9	-94	-46	-51	-56	-63	-70	-80	-90	-102	-257	-661	
Debt service	0	*	-2	-4	-7	-10	-14	-18	-23	-29	-35	-24	-143	
Extend Certain Income Tax and Estate and Gift Tax Provisions Scheduled to Expire on December 31, 2012, and Index the AMT for Inflation <sup>g</sup>														
Effect on the deficit <sup>b</sup>	0	-12	-223	-344	-386	-410	-435	-460	-487	-515	-546	-1,376	-3,820	
Debt service	0	*	-5	-15	-32	-53	-78	-106	-135	-168	-203	-105	-795	
Extend Other Expiring Tax Provisions <sup>h</sup>														
Effect on the deficit <sup>b</sup>	*	-12	-77	-113	-100	-87	-80	-75	-72	-71	-73	-389	-759	
Debt service	*	*	-2	-5	-10	-16	-21	-26	-31	-37	-42	-33	-191	

Continued

Table 1-7.

Continued

**Budgetary Effects of Selected Policy Alternatives Not Included in CBO's Baseline**

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total		
												2012-	2012-	
												2016	2021	
<b>Memorandum:</b>														
Total Outlays for Operations in Afghanistan, Iraq, and Other Overseas														
Contingency Operations in CBO's Baseline	170	170	168	167	167	170	173	176	180	184	188	842	1,743	
Total Deficit in CBO's Baseline	-1,480	-1,100	-704	-533	-551	-659	-617	-610	-696	-739	-763	-3,547	-6,971	

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.

Notes: Negative numbers indicate an increase in the deficit; positive numbers indicate a decrease in the deficit.

GDP = gross domestic product; AMT = alternative minimum tax; \* = between -\$500 million and \$500 million.

- a. This alternative does not extrapolate the \$159 billion in budget authority for military operations and associated costs in Afghanistan and Iraq provided for 2011. However, it incorporates the assumption that future funding for operations in Afghanistan, Iraq, or elsewhere would total \$118 billion in 2012, \$83 billion in 2013, \$54 billion in 2014, and about \$35 billion a year from 2015 on—for a total of \$496 billion over the 2012–2021 period. (See Box 3-2)
- b. Excluding debt service.
- c. Under this alternative, appropriations for 2011 for operations in Afghanistan and Iraq are extrapolated according to the rules that govern CBO's baseline.
- d. The estimates are from the staff of the Joint Committee on Taxation and CBO and are preliminary.
- e. This alternative incorporates the assumption that legislative action extends title I of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (which extended for 2011 and 2012 income tax provisions enacted in 2001, 2003, and 2009) and title III of that act (which modified estate and gift taxation for 2010 through 2012). It does not incorporate the assumption that the AMT is indexed for inflation. The effects of that alternative are shown separately.
- f. This alternative incorporates the assumption that the exemption amount for the AMT (which was increased through the end of 2011) is extended at its higher amount and, together with the AMT tax brackets, is indexed for inflation after 2011. In addition, the treatment of nonrefundable personal credits (which was also continued through the end of 2011) is assumed to be extended.
- g. The combination of extending certain income tax provisions scheduled to expire on December 31, 2012, and indexing the AMT for inflation reduces revenues by more than the sum of those alternatives considered alone. The total shown here includes an additional revenue loss of \$657 billion over the 2013–2021 period resulting from the interaction of the two policies.
- h. These estimates include the impact of extending about 80 expiring provisions. Many of those credits are set to expire at the end of 2011 and many have been extended previously, such as the research and experimentation tax credit and the tax credit for ethanol-blended motor fuels. The additional first-year depreciation deduction of 50 percent for business equipment is set to expire at the end of 2012.

**Other Discretionary Spending**

Many alternative assumptions about the growth of other discretionary spending are possible. For example, if appropriations (excluding those for operations in Afghanistan and Iraq) were assumed to grow each year through 2021 at the same rate as nominal GDP—instead of at the rate of inflation—projected discretionary spending would be \$1.8 trillion higher for that period than in the baseline. In contrast, if lawmakers did not increase appropriations after 2011 to account for inflation, total

discretionary outlays would be \$1.4 trillion lower during that 10-year period than in the baseline. Under that scenario (sometimes referred to as a freeze in appropriations), total discretionary spending would fall from 9.1 percent of GDP this year to 5.5 percent in 2021—the lowest share in more than 40 years.

**Medicare's Payments to Physicians**

Under current law, Medicare spending will be constrained starting in January 2012 by the rate-setting

system—the “sustainable growth rate”—that controls the fees paid for physicians’ services. If that system is allowed to operate as it is currently structured, those fees will be reduced by about 28 percent in January 2012 and by additional amounts in subsequent years, CBO projects. If, instead, lawmakers overrode those scheduled reductions (as has happened every year since 2003), spending on Medicare would be significantly greater than the amount that is projected in CBO’s baseline. For example, if payment rates remained at the 2011 level through 2021, Medicare outlays (including offsetting receipts) over the next 10 years would be about \$250 billion (or about 3 percent) higher than in the baseline.

### Revenues

Under the rules that govern CBO’s baseline, all of the provisions of the 2010 tax act are assumed to expire as scheduled over the next two years. Those expirations will increase net revenues by raising individual income tax rates, reducing the child tax credit, eliminating the American Opportunity Credit, raising estate tax rates and lowering the effective exemption amount, and making other changes.<sup>16</sup> If some of those expiring provisions or other provisions that are set to expire under current law were extended through 2021, total revenues could be significantly lower than in the baseline. For example, if tax provisions of the 2010 tax act that were originally enacted in 2001, 2003, and 2009, or that modified estate and gift taxation (thus not including changes to the exemption amount for the AMT) were extended, total revenues over the 2012–2021 period would be \$2.5 trillion lower, according to preliminary estimates by CBO and the staff of the Joint Committee on Taxation.<sup>17</sup> Under that scenario, the effect of reducing the amount of regular income tax that people owed would be partly offset by an increase in the number of taxpayers subject to the AMT.

Another alternative policy that could alter revenues involves modifying the AMT. Because the exemption amount and brackets for the AMT do not automatically increase with inflation (as the parameters of the regular

individual income tax do), many more people become subject to the AMT as time goes on. That phenomenon will cause the impact of the AMT to increase sharply in coming years under current law. If, instead, the AMT was indexed for inflation after 2011 (with no other changes to the tax code), federal revenues over the next 10 years would be \$661 billion lower than the amount in the baseline.

The number of taxpayers who are subject to the AMT will depend on whether the expiring tax provisions included in the recent legislation remain in effect. If those provisions were extended and the AMT was indexed for inflation, the combination of the two changes would reduce revenues by \$657 billion more than the sum of the two policy alternatives considered separately. Thus, the total impact of extending certain income tax and estate and gift tax provisions that are set to expire in the next 10 years and indexing the AMT for inflation would be to reduce revenues over the 2012–2021 period by \$3.8 trillion. Under that scenario, revenues would average about 18 percent of GDP through 2021, equal to their 40-year average.

Combining those extensions of expiring tax provisions and indexing of the AMT with maintaining Medicare’s payment rates for physicians—policies that have recently been extended for one or two years—would, relative to the baseline projections for the 2012–2021 period, increase cumulative deficits by nearly \$4.9 trillion (including debt-service costs), yielding cumulative deficits of \$11.9 trillion over the 10-year period. As a share of GDP, deficits would average 6.1 percent over the coming decade and reach 6.6 percent by 2021 (see Figure 1-4 on page 16). Debt held by the public would reach 97 percent of GDP by the end of 2021, the largest share since 1946 (see Figure 1-5 on page 17).

Moreover, other tax provisions—beyond those income tax and estate and gift tax provisions already discussed—are scheduled to expire under current law. If all of the other tax provisions that are set to expire in the next 10 years (except for this year’s payroll tax reduction) were extended, revenues over the 2012–2021 period would be another \$759 billion lower than in the baseline. Therefore, the total impact of extending all of the expiring tax provisions (again, except for the payroll tax reduction) would be to reduce revenues over the next decade by \$4.6 trillion.

16. The legislation also lowered the Social Security payroll tax through 2011. Extension of that provision is not included in any of the revenue scenarios discussed in this section.

17. That estimate includes increases in outlays for refundable tax credits, but it excludes any effects that the expiration of the tax provisions would have on the economy. CBO’s baseline projection, in contrast, incorporates such macroeconomic effects.

## The Long-Term Budget Outlook

Beyond the 10-year projection period, further increases in federal debt relative to the nation's output almost certainly lie ahead if current policies remain in place. The aging of the population and rising costs for health care will push federal spending as a percentage of GDP well above that in recent decades. In particular, spending on the government's major mandatory health care programs—Medicare, Medicaid, CHIP, and health insurance subsidies to be provided through the new insurance exchanges—along with Social Security will increase from roughly 10 percent of GDP in 2011 to about 16 percent over the next 25 years. If revenues stay close to their average share of GDP for the past 40 years, that rise in spending will lead to rapidly growing budget deficits and surging federal debt.

Although deficits during or shortly after a recession generally hasten economic recovery, persistent deficits and continually mounting debt would have several negative economic consequences for the United States.<sup>18</sup> Some of those consequences would arise gradually: A growing portion of people's savings would go to purchase government debt rather than toward investments in productive capital goods such as factories and computers; that "crowding out" of investment would lead to lower output and incomes than would otherwise be the case. In addition, if the payment of interest on the extra debt was financed by imposing higher marginal tax rates, those rates could discourage work and saving and further reduce output; alternatively, the growing interest payments might force reductions in spending on government programs. Moreover, rising debt would increasingly restrict the ability of policymakers to use fiscal policy to respond to unexpected challenges, such as economic downturns or international crises.

Beyond those gradual consequences, a growing federal debt also would increase the probability of a sudden fiscal crisis, during which investors would lose confidence in the government's ability to manage its budget and the government would thereby lose its ability to borrow at affordable rates. It is possible that interest rates would rise gradually as investors' confidence faltered, giving legislators warning of the worsening situation and

sufficient time to make policy choices that could avert a crisis. Indeed, because interest rates on Treasury securities are unusually low today, such a crisis does not appear imminent in the United States. But as other countries' experiences show, investors can lose confidence abruptly and interest rates on government debt can rise sharply and unexpectedly.

The exact point at which such a crisis might occur for the United States is unknown, in part because the ratio of federal debt to GDP is climbing into unfamiliar territory and in part because the risk of a crisis is influenced by other factors, including the government's long-term budget outlook, its near-term borrowing needs, the amount of private saving, and foreign investors' willingness to invest in U.S. assets. Thus, there is no way to predict with any confidence whether and when such a crisis might occur and no identifiable tipping point of debt relative to GDP. However, the risk of a crisis probably will increase when investors' growing confidence in the global recovery and the stability of the financial system increases their desire to hold private securities and foreign debt rather than Treasury securities. Moreover, the risk would probably become much larger if debt grew substantially more relative to GDP and if that debt-to-GDP ratio was poised to continue to rise.

In June 2010, CBO issued long-term budget projections under two scenarios that reflected different assumptions about future policies for revenues and spending.<sup>19</sup> The extended-baseline scenario was based on the assumption that, by and large, current law would continue without change. Under that assumption, revenues would climb quickly to a higher share of GDP than has been typical in recent decades. Even so, federal debt held by the public would rise from 62 percent of GDP at the end of fiscal year 2010 to about 80 percent of GDP by 2035. By comparison, only for a few years in U.S. history—during and shortly after World War II and again in 2009 and 2010—has federal debt exceeded 50 percent of GDP. The baseline budget projections presented in this report show larger budget deficits and accumulated debt over the next 10 years than the baseline projections on which the June 2010 long-term projections were based. (Debt is now projected to equal 76 percent of GDP at the end of 2020, compared with last year's projection of 68 percent.)

18. For more analysis about the effects of the long-term budget imbalance, see Congressional Budget Office, *Federal Debt and the Risk of a Fiscal Crisis* (July 27, 2010) and *Economic Impacts of Waiting to Resolve the Long-Term Budget Imbalance* (December 2010).

19. See Congressional Budget Office, *The Long-Term Budget Outlook* (June 2010, revised August 2010).

Accordingly, an extended-baseline scenario based on the current 10-year outlook would be even worse, all else being equal, than the one CBO published last June.

CBO also prepared a long-term budget projection under an alternative fiscal scenario that incorporated several changes to current law that are widely expected to occur or that would modify some provisions of law that might be difficult to sustain for a long period. Under that scenario, revenues stayed close to their historical relationship to GDP and debt soared above its historical peak relative to GDP by 2025 and continued to climb thereafter. Such an alternative fiscal scenario based on the current 10-year outlook would be even worse.

To prevent debt from becoming unsupportable, policymakers will have to substantially restrain the growth of spending, raise revenues significantly above their

historical share of GDP, or pursue some combination of those two approaches. The longer the necessary adjustments are delayed, the greater will be the negative consequences of the mounting debt, the more uncertain individuals and businesses will be about future government policies, and the more drastic the ultimate policy changes will need to be. But changes of the magnitude that will ultimately be required could be disruptive. Therefore, policymakers may wish to implement them gradually so as to avoid a sudden negative impact on the economy, particularly as it recovers from the severe recession, and so as to give families, businesses, and state and local governments time to plan and adjust. Allowing for such gradual implementation would mean that remedying the nation's fiscal imbalance would take longer and therefore that major policy changes would need to be enacted soon to limit the further increase in federal debt.

## The Economic Outlook

**T**he U.S. economy has struggled to recover from the recent recession, whose immediate causes included a large decline in house prices and a financial crisis. The pace of growth in the nation's output has been anemic compared with that in most other recoveries since World War II, and the unemployment rate has remained quite high. That slower-than-average recovery is broadly consistent with the history of recoveries following financial crises around the world. Although recent actions by U.S. policymakers should help support further gains in real (inflation-adjusted) gross domestic product (GDP) in 2011, production and employment are likely to stay well below the economy's potential for a number of years.

The Congressional Budget Office (CBO) expects that economic growth will remain moderate this year and next. As measured by the change from the fourth quarter of the previous year, real GDP, which rose by an estimated 2.5 percent in 2010, is projected to increase by 3.1 percent this year and by 2.8 percent next year (see Table 2-1).<sup>1</sup> That forecast reflects CBO's expectation of continued strong growth in business investment, improvements in both residential investment (which includes the construction of new homes, home improvements, and brokers' commissions on home sales) and net exports (exports minus imports), and modest increases in consumer spending. It also incorporates the expected impact of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312, hereafter referred to as the 2010 tax act), enacted in December, which delayed the tax increases and other fiscal restraint that would otherwise have occurred

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1. Data for the fourth quarter of 2010 were not available when CBO's forecast was completed in early December. Numbers in the text and tables that rely on data for GDP in that quarter are therefore based on CBO's estimates made in early December. More recent estimates from other forecasters, based on additional data, suggest that growth in the fourth quarter was higher than CBO estimated.

in 2011. Those rates of growth exceed CBO's estimate of growth in potential output, the amount of output that corresponds to a high use of resources (capital and labor); accordingly, the projected difference between actual output and potential output (the output gap) narrows somewhat by the end of 2012.

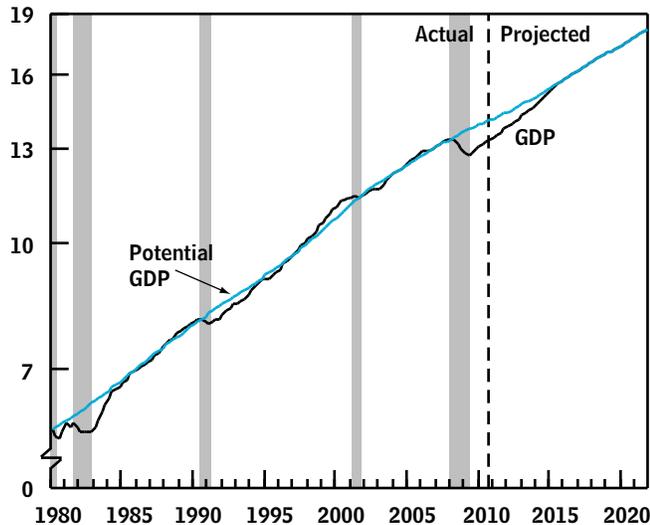
Real GDP continues to expand faster than potential output through 2016 in CBO's projection, spurred primarily by stronger investment. From 2013 to 2016, real GDP increases by an average of 3.4 percent per year, and the output gap closes completely by the second half of 2016 (see Figure 2-1).

With modest growth in output projected for the next two years, CBO expects employment to recover slowly. Employment growth will also be restrained by structural impediments in the labor market (such as a mismatch between the requirements of existing job openings and the characteristics of job seekers, including skills and geographic location) that have hindered the reemployment of jobless workers. As a result, the unemployment rate—the number of jobless people who are available for work and are actively seeking jobs, expressed as a percentage of the labor force—falls only to 9.2 percent in the fourth quarter of 2011 and to 8.2 percent in the fourth quarter of 2012 in CBO's forecast (see Figure 2-2). CBO expects the unemployment rate to continue declining thereafter, reaching 5.3 percent by 2016.

Inflation, in CBO's view, is likely to remain low over the next few years, reflecting the large amount of unused resources in the economy. By any of the aggregate measures of inflation that CBO forecasts—the personal consumption expenditures (PCE) price index, the consumer price index for all urban consumers (CPI-U), the “core” versions of both indexes (which exclude prices for food and energy), and the GDP price index—inflation is

**Figure 2-1.****Real Gross Domestic Product**

(Trillions of 2005 dollars, log scale)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: Real gross domestic product (GDP) is the output of the economy adjusted to remove the effect of inflation.

Potential GDP is CBO's estimate of the output the economy would produce with a high rate of use of its capital and labor resources.

Data are quarterly. Actual data for GDP are plotted through the third quarter of 2010; projected GDP and potential GDP are plotted through the fourth quarter of 2021.

projected to change little in the next two years and to average no more than 2.0 percent a year between 2013 and 2016.<sup>2</sup>

In CBO's forecast, interest rates rise as the economy expands. The interest rate on 3-month Treasury bills averages about 0.3 percent in 2011, up from about 0.1 percent in 2010, then climbs to 1.1 percent in 2012 and averages 3.6 percent in the 2013–2016 period. The interest rate on 10-year Treasury notes rises from an average of 3.2 percent in 2010 to 3.4 percent in 2011, 3.8 percent in 2012, and an average of 4.7 percent from 2013 to 2016.

2. The PCE price index is preferred by many analysts and is emphasized by the Federal Reserve in its deliberations about monetary policy because that index is continually updated to reflect consumers' current spending patterns, whereas the CPI-U is based on the pattern of consumer spending from the 2007–2008 period.

From 2017 to 2021, CBO's projections do not incorporate movements in the business cycle but instead reflect the agency's assessment of economic conditions on average. GDP will grow at the same rate as potential GDP, averaging 2.4 percent a year, CBO projects. The unemployment rate in that period will average 5.2 percent, equal to CBO's estimate for that period of the rate of unemployment arising from sources other than the business cycle, the so-called natural rate of unemployment. Inflation, as measured by the PCE price index, is forecast to average 2.0 percent per year. CBO also projects that the interest rates on 3-month Treasury bills and 10-year Treasury notes will be about 4.4 percent and 5.4 percent, respectively, during those years.

CBO's current economic projections differ in some respects from its previous projections and those recently made by other forecasters. The current forecast differs from CBO's August 2010 projections largely because of the enactment of legislation affecting fiscal policy. Since August, CBO has also reassessed the extent to which the aftermath of the financial crisis will slow the growth of economic activity in subsequent years. In the current forecast, real growth is slightly faster in 2011, owing primarily to the effects of the 2010 tax act. That pace is a little slower from 2012 to 2014 as the provisions of that law expire; by 2020, the level of real GDP is a bit lower than in the August forecast. Although qualitatively similar, CBO's forecasts of output growth and inflation are on the low side in comparison with the average of private forecasts in the January *Blue Chip* survey (which includes about 50 forecasts by private-sector economists) and with the forecasts the Federal Reserve released in November.

The current business cycle has been unusual and is likely to continue to have unusual features that are hard to predict. Many developments could lead to economic outcomes that differ substantially, in one direction or the other, from those CBO has projected. Thus, although economic forecasts are always subject to considerable uncertainty, the current outlook is especially uncertain.

**The Recovery Through 2010**

The U.S. economy has been slow to recover from the deep recession that, according to the National Bureau of Economic Research, began in December 2007 and ended in June 2009. The growth of output and, particularly, the growth of employment have been slower than during the

**Table 2-1.****CBO's Economic Projections for Calendar Years 2010 to 2021**

	Estimated, 2010	Forecast		Projected Annual Average	
		2011	2012	2013-2016	2017-2021
<b>Fourth Quarter to Fourth Quarter (Percentage change)</b>					
Real GDP	2.5	3.1	2.8	3.4	2.4
PCE Price Index	1.4	1.2	1.3	1.7	2.0
Core PCE Price Index <sup>a</sup>	1.0	1.0	1.2	1.6	2.0
Consumer Price Index <sup>b</sup>	1.2 <sup>c</sup>	1.3	1.3	2.0	2.3
Core Consumer Price Index <sup>a</sup>	0.6 <sup>c</sup>	0.9	1.2	1.9	2.2
GDP Price Index	1.3	0.9	1.4	1.8	2.0
Nominal GDP	3.8	4.1	4.3	5.2	4.4
<b>Fourth-Quarter Level (Percent)</b>					
Unemployment Rate	9.6 <sup>c</sup>	9.2	8.2	5.3 <sup>d</sup>	5.2 <sup>e</sup>
<b>Year to Year (Percentage change)</b>					
Real GDP	2.8	2.7	3.1	3.4	2.4
PCE Price Index	1.8	1.3	1.2	1.7	2.0
Core PCE Price Index <sup>a</sup>	1.4	1.0	1.1	1.6	2.0
Consumer Price Index <sup>b</sup>	1.6 <sup>c</sup>	1.6	1.3	1.9	2.3
Core Consumer Price Index <sup>a</sup>	1.0 <sup>c</sup>	0.9	1.0	1.8	2.2
GDP Price Index	0.9	0.9	1.3	1.7	2.0
Nominal GDP	3.8	3.7	4.4	5.1	4.4
<b>Calendar Year Average</b>					
Interest Rates (Percent)					
Three-month Treasury bill	0.1 <sup>c</sup>	0.3	1.1	3.6	4.4
Ten-year Treasury note	3.2 <sup>c</sup>	3.4	3.8	4.7	5.4
Unemployment Rate (Percent)	9.6 <sup>c</sup>	9.4	8.4	6.4	5.2
Nominal GDP (Billions of dollars)	14,649	15,184	15,858	19,362 <sup>d</sup>	24,064 <sup>e</sup>
Tax Bases (Billions of dollars)					
Domestic economic profits	1,234	1,308	1,355	1,515 <sup>d</sup>	1,658 <sup>e</sup>
Wages and salaries	6,403	6,702	7,070	8,710 <sup>d</sup>	10,865 <sup>e</sup>
Tax Bases (Percentage of GDP)					
Domestic economic profits	8.4	8.6	8.5	8.1	7.1
Wages and salaries	43.7	44.1	44.6	44.8	45.1

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve.

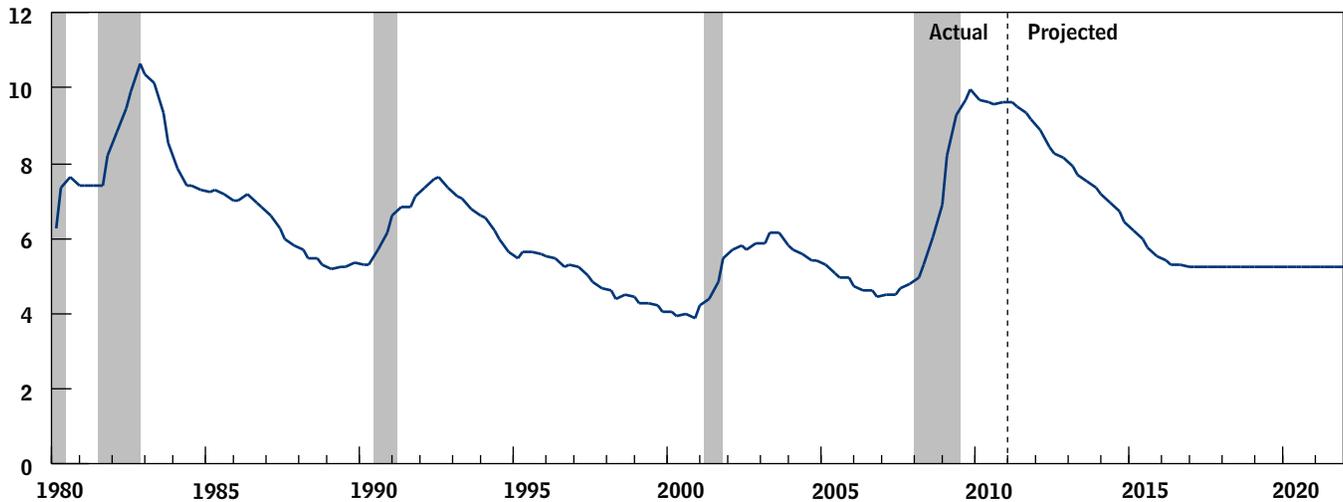
Notes: Economic projections for each year from 2010 to 2021 appear in Appendix D.

GDP = gross domestic product; PCE = personal consumption expenditures.

- a. Excludes prices for food and energy.
- b. The consumer price index for all urban consumers.
- c. Actual value for 2010.
- d. Value for 2016.
- e. Value for 2021.

**Figure 2-2.****Unemployment Rate**

(Percent)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: The unemployment rate is a measure of the number of jobless people who are available for work and are actively seeking jobs, expressed as a percentage of the civilian labor force.

Data are quarterly. Actual data are plotted through the fourth quarter of 2010; projections are plotted through the fourth quarter of 2021.

average recovery since World War II. That subpar performance largely reflects the nature of the recession, which was triggered by a collapse in house prices and a subsequent financial crisis—events unlike anything this country has seen since the Great Depression. Economies tend to recover slowly from recessions caused by such events, even when supported by monetary and fiscal policy intervention.

**Output, Employment, and Unemployment**

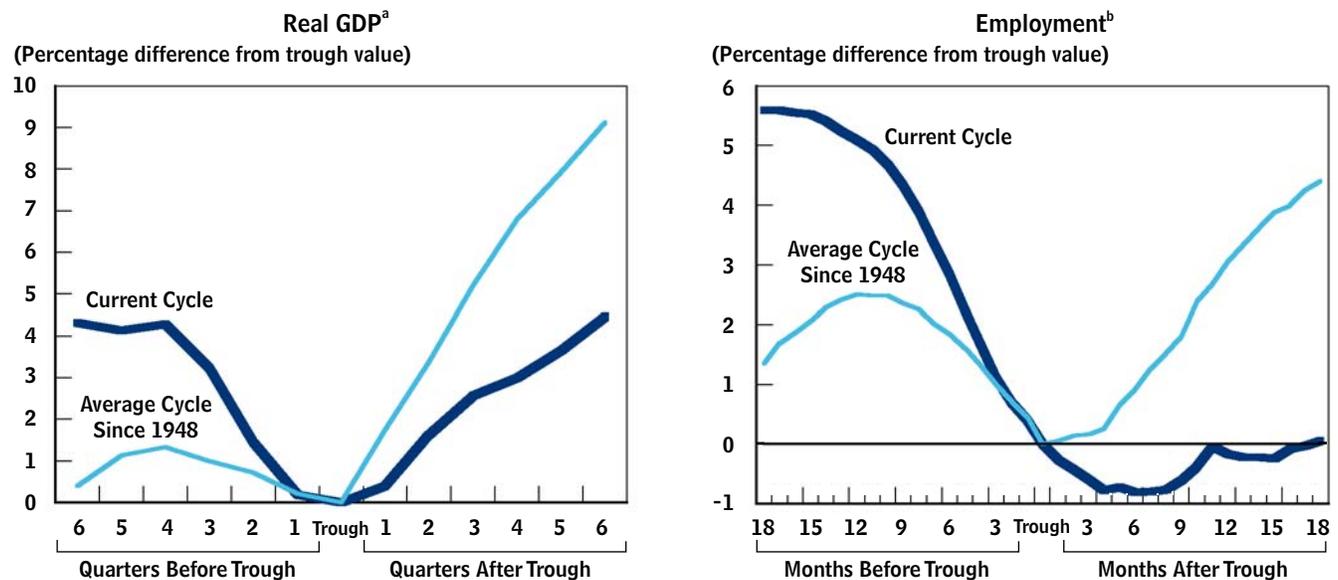
Although recent data indicate that growth may be picking up, the pace of economic recovery thus far has been sluggish in comparison with that of most previous postwar recoveries. Real GDP rose by a total of 4.5 percent over the first six quarters of the recovery (that is, from the second quarter of 2009 to the fourth quarter of 2010), roughly retracing its decline during the recession.<sup>3</sup> However, that growth is less than half of the 9 percent average increase in real GDP in the first six quarters of previous postwar recoveries (see the left-hand panel of Figure 2-3).

3. That estimate of real GDP growth uses available data through the third quarter of 2010 and the *Blue Chip* consensus forecast for the fourth quarter of 2010.

The moderate growth in output thus far during the recovery is particularly unusual for the aftermath of a severe recession. Other severe recessions in the postwar period, including those that began in 1973 and 1981, have been followed by vigorous recoveries, and the recent recession was the most severe: Real GDP fell 4.1 percent from peak to trough, the largest decline among postwar recessions.

Consumer spending has recovered more slowly than it has, on average, following postwar recessions. Investment in business structures (such as factories and shopping malls) has continued to fall since the end of the recession, and investment in residential structures (such as houses and apartment buildings) has not begun to recover. By contrast, business investment in equipment and software has grown faster in the current recovery than it has during previous recoveries.

Gains in employment during the recovery also have been weak, recapturing only a small fraction of the jobs lost since the recession began. After falling by 7.3 million during the recession, payroll employment increased by a

**Figure 2-3.****Recovery in Real Gross Domestic Product and Employment**

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Aspen Publishers, Inc., *Blue Chip Economic Indicators* (January 10, 2011).

Note: The trough is the end of a recession as defined by the National Bureau of Economic Research. Computation of the average cycle since 1948 excludes the 1980 cycle (because the subsequent quarters include another recession) and the current cycle.

- Real gross domestic product (GDP) is the output of the economy adjusted to remove the effect of inflation. For the current cycle, the sixth quarter value after the trough reflects the *Blue Chip* consensus estimate of real GDP for the fourth quarter of 2010.
- Employment comprises all nonfarm payroll employees.

mere 72,000 jobs (or 0.06 percent), on net, between June 2009 and the end of 2010.<sup>4</sup> By contrast, employment rose by an average of 4.4 percent in the first 18 months of past recoveries (see the right-hand panel of Figure 2-3).

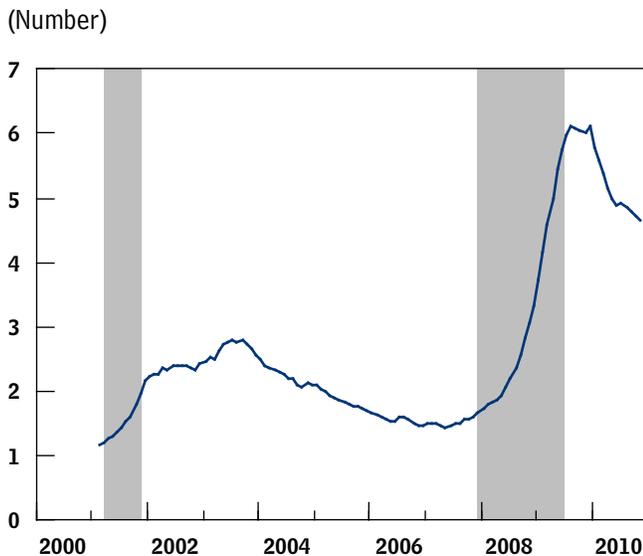
Consequently, the rate of unemployment has fallen by only a small amount. It climbed to 10.1 percent of the labor force in 2009, approaching the 10.7 percent reached in the last quarter of 1982 (which was itself the highest rate since 1948, when comparable data first became available), and then declined only to 9.4 percent by December 2010. The unemployment rate would have been even higher during the recovery had the size of the

labor force not fallen as much as it did. The number of unemployed workers who reported becoming discouraged about their job prospects and dropping out of the labor force rose markedly during and following the recession. If those discouraged workers were counted as being in the labor force and unemployed, the average unemployment rate in 2010 would have been 10.3 percent rather than the actual 9.6 percent; in 2007, before the recession, counting discouraged workers would have added only about 0.2 percentage points to the unemployment rate.

Other measures related to the labor market suggest even more slack. The number of workers who are employed part time but want full-time work has been almost 9 million for the past two years, about double the number before the recession. Moreover, many of those who are unemployed have been out of work for a long time. On average, 43 percent of workers who were unemployed in 2010 were out of work for more than 26 weeks and 29 percent for a year or more—rates that are unprece-

4. Those figures are based on current official data and do not take into account benchmark revisions scheduled for early February 2011. In its preliminary benchmark announcement, the Bureau of Labor Statistics, which calculates payroll employment on the basis of its survey of nonfarm establishments, indicated that the March 2010 employment level would probably be revised downward by about 370,000. Estimates of employment growth since then may also be revised.

**Figure 2-4.**  
**Unemployed Workers per Job Opening**



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Note: Data are a three-month moving average—that is, the average of the current month and the two preceding months—and are plotted through November 2010.

dented in the postwar era. In addition, there were nearly five unemployed workers per job opening for most of 2010, down from slightly over six in late 2009 but still much higher than the peak following the 2001 recession, when the rebound in employment was also unusually slow (see Figure 2-4).

### The Long Shadow of Financial Crisis

The anemic economic upturn largely reflects the nature of the recent recession, which was triggered by a large drop in house prices and a financial crisis. That crisis followed an extended period of rising home prices and mortgage-related debt that increased the risk faced by many households and financial institutions. According to the national Standard and Poor's (S&P) Case-Shiller home price index, house prices fell by more than 10 percent from their peak in 2006 to the beginning of the recession in December 2007. As losses on mortgages extended to risky borrowers began to rise unexpectedly, investors holding securities tied to the performance of such mortgages realized that the securities were riskier than they had assumed, and the prices of those securities began to fall.

The crisis reflected a loss in confidence by investors. As losses mounted on those mortgage-related securities, investors began to question the ability of a number of large financial institutions with a potentially large exposure to losses on those securities to meet their obligations. Lending among banks declined, and the rates at which banks could borrow from other banks rose. Lenders in turn tightened their standards and terms for borrowing by consumers and businesses. The market for securities backed by other types of assets (such as home equity loans, commercial real estate, and credit card debt), which channels a significant amount of credit to consumers and businesses, experienced a sharp drop in volume as concerns about defaults on those securities mounted. The turmoil in the credit markets spread to the stock market and eventually to the broader economy: Businesses lowered their production and their demand for loans and workers, and consumers reduced their demand for loans and for goods and services.

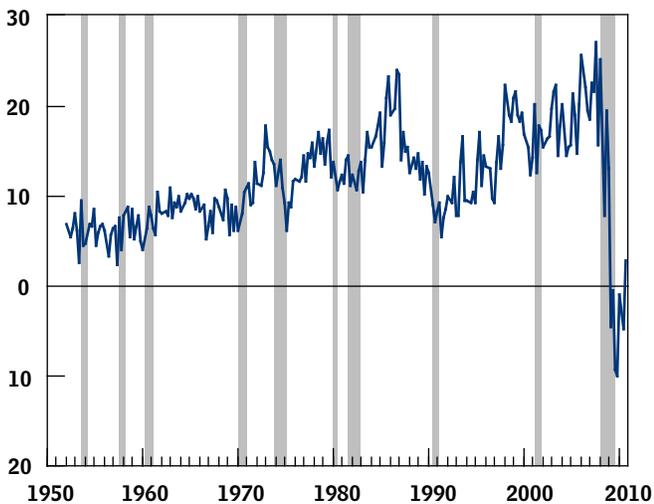
The contraction in credit markets accompanying the downturn was unparalleled in the postwar era. Net lending by the financial sector was equal to about 28 percent of GDP in the first quarter of 2008; by 2009, however, the amount of loan losses and loan repayments exceeded the amount of new lending, and net lending was therefore negative, falling to -10 percent of GDP in the fourth quarter of 2009 (see Figure 2-5). By the third quarter of 2010 (the latest available data), net lending had become positive, although credit conditions remained tighter than before the recession.

Although this recovery has been slow compared with most other postwar recoveries, its pace is broadly consistent with international experience. Recoveries following financial crises have generally been slow because the financial imbalances before such crises usually build up over a number of years and can take a long time to unwind.<sup>5</sup>

5. See, for example, Carmen Reinhart and Kenneth Rogoff, "The Aftermath of Financial Crises," *American Economic Review*, vol. 99, no. 2 (May 2009), pp. 466–472; and Carmen M. Reinhart and Vincent R. Reinhart, "After the Fall" (paper presented at the Federal Reserve Bank of Kansas City Jackson Hole Symposium, August 26–28, 2010). For a discussion of policy responses, see Luc Laeven and Fabian Valencia, *Resolution of Banking Crises: The Good, the Bad, and the Ugly*, IMF Working Paper No. 10/146 (Washington, D.C.: International Monetary Fund, June 2010).

**Figure 2-5.****Net Lending by the Financial Sector**

(Percentage of gross domestic product)



Sources: Congressional Budget Office; Federal Reserve.

Notes: Net lending comprises new lending by U.S. financial institutions minus debt repayments and loan charge-offs (losses).

Data are quarterly and are plotted through the third quarter of 2010.

**Household Wealth.** The recovery has been hampered by a slow rebound in household wealth (or net worth). Consumers' spending generally increases as wealth increases. The net worth of households fell by about \$14 trillion, or about 21 percent, during the recession, primarily reflecting losses on real estate and corporate equities. Relative to disposable personal income (that is, wages, salaries, and other income earned by individuals, net of personal taxes), household net worth fell from about 6.5 times income to about 4.5 times income over the same period, an unprecedented decline (see Figure 2-6). Between the end of the recession and the third quarter of 2010, net wealth rose by about \$4 trillion, recovering less than a third of what had been lost during the recession.

Falling house prices have been a major contributor to the erosion of household wealth. House prices, on average, fell by more than 10 percent before the recession and plummeted by another 22 percent during the recession; that total decline wiped out nearly \$6 trillion from the net value of real estate held by households. From the end of the recession to the third quarter of 2010, the value of those holdings was largely unchanged.

The loss of housing wealth has constrained the ability of consumers to finance home improvements and other purchases. During the housing boom, when house prices were increasing rapidly, many homeowners borrowed against rising home equity to fund their spending. That borrowing was sharply curtailed after home prices began to fall, which reduced the amount of collateral available for such loans.

Losses in the stock market cut into household wealth during the recession even more than the loss of housing wealth, though equity prices have partly recovered since then. The total value of corporate equities held by households directly or indirectly (through pensions, life insurance companies, government retirement programs, or mutual funds) fell by almost \$8 trillion during the recession. By the third quarter of 2010, households' equity holdings had regained half of that value.<sup>6</sup> Although direct holdings of stocks are concentrated among a minority of households, consumer spending tends to rise and fall in tandem with the ups and downs of the stock market.

**Financial Markets.** Lenders' caution in supplying credit also has contributed to the sluggish recovery. Responding to unexpectedly large losses (on mortgages and other consumer and commercial loans) and to the prospect of additional losses during the recession, banks raised their lending standards by requiring larger down payments, shorter loan maturities, and higher credit scores. At the same time, banks increased their holdings of safe assets (those with a low risk of default); since the beginning of 2009, for example, banks' holdings of securities backed by the U.S. government have grown by almost \$400 billion, an increase of 30 percent.

The availability of credit for residential mortgages, either for buying new houses or for refinancing existing mortgages, remains more constricted than before the crisis. Federal backing for Fannie Mae and Freddie Mac and programs of federal agencies such as the Federal Housing Administration have ensured a steady supply of financing for qualified borrowers. However, the market for securities backed by residential mortgages that do not have a federal guarantee, which funneled credit to riskier

6. In late 2010, the stock market, as measured by the S&P 500, reached its highest level in over two years—contributing to a further rebound in wealth.

## Figure 2-6. Household Net Worth

(Ratio to disposable personal income)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve.

Notes: Household net worth comprises total assets minus total liabilities on household balance sheets as reported in the Federal Reserve's flow-of-funds accounts.

Personal disposable income is the after-tax income of individuals.

Data are quarterly and are plotted through the third quarter of 2010.

borrowers before the financial crisis, has barely started to reemerge.

Credit has also been constrained by the depressed state of markets for securities backed by other types of assets. When the financial crisis began, many of those markets nearly ceased operating. Since then those markets have reopened, but some potential borrowers have had difficulty obtaining loans for which they would qualify if those markets were operating normally, especially borrowers seeking loans for office buildings, hotels, and other forms of commercial real estate.

Conditions have recently started to ease in other credit markets (such as the market for consumer credit), but standards remain much tighter than before the recession (when standards were unusually lax) and problems persist for some financial institutions and markets. For example, more than 300 financial institutions have failed since the beginning of 2007, when the financial crisis began, and as of the third quarter of 2010 the Federal Deposit Insur-

ance Corporation (FDIC) had identified 860 “problem” banks, the highest number since 1993, following problems in the savings and loan and commercial banking industries. Although most large banks appear to be in much better health, credit conditions overall are not likely to ease substantially until the economy strengthens further.<sup>7</sup>

### Economic Policy

Monetary and fiscal policy combined to support the economy in the downturn and promote recovery. The Federal Reserve used both traditional and nontraditional methods to support financial markets and institutions and provide monetary stimulus. Fiscal stimulus came from the effects of legislation and the automatic fiscal stabilizers—changes in federal revenues and outlays caused by the ups and downs of business cycles rather than by legislative action on the part of the government.

**Monetary Policy.** The Federal Reserve turned first to its traditional methods of supporting economic activity and financial markets. By the end of 2008, the Federal Reserve had lowered its target for the federal funds rate—an interest rate on overnight lending among banks that the Federal Reserve adjusts to affect economic activity and inflation—to nearly zero, which helped to lower market interest rates.

Because of the severity of the financial crisis, however, the Federal Reserve also used nontraditional means to provide additional monetary stimulus.<sup>8</sup> Between late 2008 and early 2010, it purchased about \$1.25 trillion of mortgage-backed securities guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae; \$175 billion of debt securities issued by those agencies; and \$300 billion of U.S. Treasury securities with maturities of more than one year. The available evidence suggests that those purchases

7. Banks are finding it easier to sell portions of their loans to other banks, a sign that banks are less wary of each other. Another sign is the relatively narrow spreads on lending between banks. (A spread is the difference between two interest rates—in this case, the difference between the rate on short-term borrowing by banks and the rate on comparable government debt.)

8. Analysts often gauge the Federal Reserve's preferred level of the federal funds rate on the basis of models of the past responses of that rate to inflation and recessions. Such models are widely termed “Taylor-rule models.” Most Taylor-rule specifications indicate that, if it were possible, the Federal Reserve's target federal funds rate would have been well below zero during the recession and would have remained below zero in 2010.

lowered mortgage interest rates by as much as half a percentage point.<sup>9</sup> In addition, the Federal Reserve created a number of emergency programs, most of which have now largely wound down, to restore liquidity and confidence in the markets by enabling banks and other financial institutions to borrow against assets in their portfolios. It also provided financing to several large financial institutions whose problems during the crisis were believed to seriously threaten the stability of the financial system as a whole.<sup>10</sup> And in November 2010, the Federal Reserve announced its intention to purchase additional Treasury securities this year.

The Federal Reserve's large-scale purchases of assets and other nontraditional actions were a response to the financial crisis and the depth and persistence of the recession. By those actions the Federal Reserve aimed to stimulate the economy and avoid deflation—a persistent decline in a broad range of prices of goods and services (that is, a negative rate of inflation). Historical experience indicates that inflation falls during periods when productive resources (capital and labor) are severely underused. In combination with a falling and very low rate of inflation (consumer prices increased by only 0.2 percent in 2009), the extraordinary amount of underused productive resources meant that there was some risk that the rate of inflation would continue falling into negative territory. Deflation, in turn, would heighten the risk of a further decline in economic activity if consumers and firms slowed their purchases in anticipation of even lower prices. In CBO's view, the prospect of stronger real growth since late 2010 has diminished the risk of deflation.

**Fiscal Policy.** Fiscal policy, broadly defined, aided the economy over the past few years, not only through the effects of legislation on spending and revenues but also through the effects of the automatic fiscal stabilizers.

9. See Joseph Gagnon and others, *Large-Scale Asset Purchases by the Federal Reserve: Did They Work?* Federal Reserve Bank of New York Staff Report No. 441 (March 2010); and James D. Hamilton and Jing Wu, *The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment*, University of California, San Diego, Working Paper (August 25, 2010; revised November 3, 2010).

10. See Congressional Budget Office, *The Budgetary Impact and Subsidy Costs of the Federal Reserve's Actions During the Financial Crisis* (May 2010).

Legislation included measures that supported the financial system and that lowered taxes and increased federal spending. The Troubled Asset Relief Program (TARP) bolstered financial markets, largely by providing equity capital to banks and other financial institutions.<sup>11</sup> Direct fiscal stimulus came from the Economic Stimulus Act of 2008, which was enacted in February 2008, and the much larger American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5), which was enacted in February 2009. The Economic Stimulus Act provided tax rebates to low- and middle-income taxpayers, tax incentives to stimulate business investment, and an increase in the limits imposed on mortgages eligible for purchase by Fannie Mae and Freddie Mac. ARRA authorized purchases of goods and services by the federal government, transfers to state and local governments (for spending on infrastructure and other purposes), payments to individuals, and temporary tax reductions for individuals and businesses (such as the Making Work Pay tax credit and favorable tax treatment of business investment).<sup>12</sup> Other legislation with stimulative effects extended unemployment insurance benefits (as did ARRA), provided credits for first-time home buyers (which were extended once by ARRA and again by the Worker, Homeownership, and Business Assistance Act of 2009, P.L. 111-92), and created the Car Allowance Rebate System (the CARS program, commonly referred to as “Cash for Clunkers”).

Fiscal stimulus without the need for new legislation came from automatic stabilizers. Those stabilizers arose from the response of the federal tax system and social safety-net programs, such as the Supplemental Nutrition Assistance Program (formerly called the Food Stamp program),

11. The Emergency Economic Stabilization Act of 2008 (P.L. 110-343, Division A) authorized the Secretary of the Treasury—through the TARP—to purchase or insure troubled financial assets, up to a limit of \$700 billion in assets outstanding at any one time. Authority to initiate new programs expired in June 2010. See Congressional Budget Office, *Report on the Troubled Asset Relief Program—November 2010*.

12. CBO estimates that the stimulative impact of ARRA peaked in 2010, raising real GDP that year, on average, in a range from 1.5 percent to 4.1 percent and boosting employment by 1.3 million to 3.3 million. In estimating the effects of ARRA, CBO selected low and high estimates of the effects of each provision of ARRA that were designed to encompass most economists' views about the effects of that type of provision. See Congressional Budget Office, *Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output From July 2010 Through September 2010* (November 2010).

regular unemployment insurance benefits, and Medicaid. The stabilizers automatically dampen swings in economic activity by decreasing tax payments to the government and increasing benefit payments to households when economic activity slows (and have the opposite effect when economic activity picks up).<sup>13</sup>

## The Outlook Through 2016

The pace of recovery will remain moderate through 2016, CBO projects. As measured by the change from the fourth quarter of the previous year, real GDP, which rose by an estimated 2.5 percent in 2010, is projected to increase by 3.1 percent this year and by 2.8 percent next year. CBO expects continued strong growth in business investment, improvements in residential investment and net exports, and modest increases in spending by consumers and by state and local governments. Recent tax and spending legislation at the federal level will help delay fiscal restraint on growth until after 2011, although some restraint from the automatic fiscal stabilizers has already developed. CBO expects that monetary policy will provide near-term support to economic activity and that financial markets will continue to improve. The moderate pace of economic growth implies a gap between actual and potential output that does not fully close until the second half of 2016.

### Fiscal Policy

Under current federal laws regarding taxes and spending, which are the basis of CBO's projections, federal fiscal support for economic growth will weaken this year before turning to significant restraint in 2012 and 2013. Without the 2010 tax act, federal fiscal policy would have been restrictive this year because of the previously scheduled tax increases and the waning of the effects of ARRA.<sup>14</sup> Moreover, the contribution to growth from the automatic fiscal stabilizers is already turning restrictive in 2011, and

13. Similar but smaller automatic changes occur in state and local revenues and spending. In contrast with automatic stabilizers at the federal level, those at the state and local levels are blunted by budgetary decisions made to comply with rules for maintaining a balanced budget. Those decisions include cutting state and local spending and increasing tax rates and various fees. Despite some recent improvements in the budgets of state and local governments (achieved largely through such belt-tightening actions), the size of the resulting fiscal surplus for that sector as a whole (as measured in the national income and product accounts) offsets little of the economic stimulus from the federal sector.

those stabilizers will continue to slow growth as the economy improves.<sup>15</sup> The 2010 tax act provides some offsetting stimulus by extending tax cuts that were slated to expire at the end of 2010, including an extension through 2012 of various tax reductions enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003. The 2010 tax act also reduces the Social Security payroll tax in 2011 and extends certain additional unemployment insurance benefits through January 3, 2012.<sup>16</sup>

### Monetary Policy and Interest Rates

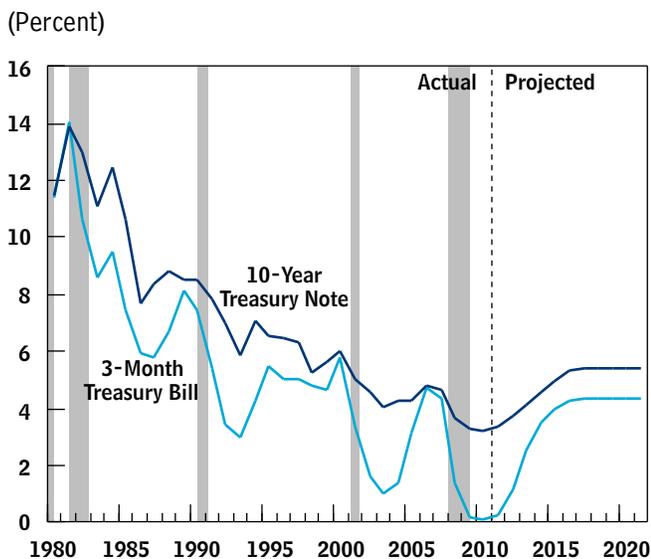
CBO expects monetary policy to remain supportive of economic activity while the economy has a substantial amount of unused resources. The federal funds rate is likely to stay at its current level of about 0.2 percent for much of this year. Moreover, CBO anticipates that the Federal Reserve will fully implement its plan, announced in November 2010, to purchase \$600 billion in mostly medium-term Treasury securities through mid-2011 and to reinvest up to \$300 billion from the proceeds of earlier investments. The plan was designed to further reduce long-term interest rates, which fell slightly in late summer as expectations of those purchases strengthened. (Since then, rates have moved up again, partly reflecting upwardly revised expectations of economic growth.) Those purchases will raise the amount of the Federal Reserve's assets to more than \$2.8 trillion by the middle of this year, CBO projects. (The expansion of the central bank's asset holdings has been financed by increases in banks' reserves held at the Federal Reserve.)

14. In the absence of the 2010 tax act, real GDP growth would have been, by CBO's estimate, between 0.9 and 2.8 percentage points lower from the end of 2010 to the end of 2011 than in CBO's forecast. Growth would be slightly higher in 2012 but would still leave the level of GDP at the end of the year between zero and 0.7 percent lower in the fourth quarter of 2012 than in CBO's forecast. In addition to helping sustain aggregate demand, the 2010 tax act encourages labor supply by forestalling increases in marginal tax rates.

15. For a discussion of automatic stabilizers, see Congressional Budget Office, *The Effects of Automatic Stabilizers on the Federal Budget* (May 2010).

16. CBO and the staff of the Joint Committee on Taxation estimate that the 2010 tax act will increase the deficit by \$390 billion in fiscal year 2011 and \$407 billion in fiscal year 2012, not including additional interest costs (see Box 1-1 on page 8).

**Figure 2-7.**  
**Interest Rates**



Sources: Congressional Budget Office; Federal Reserve.

Note: Data are annual. Actual data are plotted through 2010; projections are plotted through 2021.

CBO expects that the Federal Reserve will begin to withdraw monetary stimulus as economic conditions improve and inflation moves back up toward the range preferred by the Federal Reserve. That withdrawal will require the central bank to coordinate increases in its target for the federal funds rate with the rate it pays on its holdings of banks' excess reserves and with the rate at which it reduces the amount of assets it holds. CBO expects the Federal Reserve to begin increasing the federal funds rate in late 2011 and to begin selling a portion of its assets a year or so later.

Interest rates began to rise late last year but remain very low by historical standards. The rate on 3-month Treasury bills averaged 0.14 percent in December 2010. The rate on 10-year Treasury notes had been below 3.0 percent for most of the second half of the year but began rising steeply in early November and averaged 3.3 percent in December. Interest rates on corporate bonds and on conventional mortgages also moved higher in the last quarter of 2010.

CBO expects rates to increase further over the next few years as the recovery continues (see Figure 2-7). The interest rate on 3-month Treasury bills in CBO's forecast averages about 0.3 percent in 2011, up from about

0.1 percent in 2010, and then rises to 1.1 percent in 2012 and to 4.3 percent by 2016. The rate on 10-year Treasury notes rises more gradually, from an average of 3.2 percent in 2010 to 3.4 percent in 2011, 3.8 percent in 2012, and 5.3 percent by 2016.

### Households

In CBO's forecast, the growth of consumer spending by households remains tepid during the next few years. CBO also expects that the construction of new housing units will not return to levels consistent with population growth and demand for replacement units until 2014. That outlook reflects CBO's expectation of moderate growth in disposable personal income, slowly improving household net worth, more favorable conditions for consumer borrowing, and a large excess stock of vacant housing units.

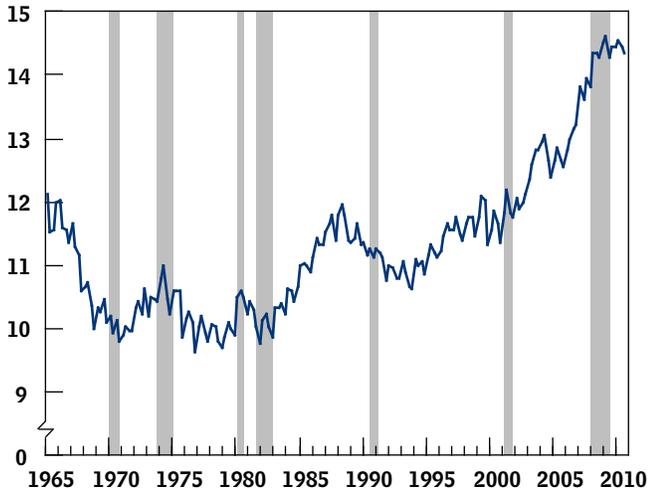
**Income.** CBO expects that a continued recovery in employment (discussed at greater length below) will generate stronger growth in income for workers and households. Wages and salaries began to rebound in 2010 and, in CBO's forecast, recover rapidly this year and next, increasing by 12 percent over that period. Total labor income, which had fallen sharply as a share of gross domestic income (GDI) in 2008 and 2009, edged up in 2010.<sup>17</sup> Propelled by the recovery in wages and salaries, labor income will continue to rise as a share of GDI in the near term, CBO projects, reversing roughly half of the drop in 2008 and 2009. Disposable personal income will be supported in 2011 by the provisions in the 2010 tax act regarding taxes and unemployment insurance but will lose that support as those provisions expire in 2012 and 2013.

**Wealth and Credit Conditions.** Improvements in household wealth are likely to remain modest in 2011, owing mostly to small further declines in house prices during the remainder of the year. In CBO's estimation, those prices are currently near their bottom and will probably begin to go up again in 2012. Specifically, CBO forecasts

17. Total labor income consists of the total compensation that employers pay their employees plus 65 percent of proprietors' income (a commonly used estimate of the proportion of proprietors' income that represents compensation for the labor effort they put into the enterprise). GDI is the sum of all income earned in the domestic production of goods and services. In theory, GDI should equal gross domestic product, but measurement difficulties leave a statistical discrepancy between the two.

**Figure 2-8.****Vacant Housing Units**

(Percentage of total units)



Sources: Congressional Budget Office; Department of Commerce, Census Bureau.

Notes: Housing units comprise rental and owner-occupied dwellings.

Data are quarterly and are plotted through the third quarter of 2010.

that the national average price of a house, as measured by the S&P Case-Shiller home price index, will decrease by an additional 5 percent from the third quarter of 2010 through the end of 2011 and then begin rising, although at a modest rate. Equity prices, another component of household wealth, will continue to grow at a rate consistent with the economic expansion, CBO projects.

Banks seem poised to increase their lending to consumers over the next few years, but credit conditions are likely to remain tighter than they were before the recession, in CBO's view. The Federal Reserve's survey of senior loan officers, for example, indicates that banks have begun to loosen lending standards on loans to consumers but that many banks do not expect standards to return to their longer-run averages any time soon. Although many small banks remain plagued by losses, banks are now seeing signs that the rates of delinquencies have crested. Nevertheless, the number of banks on the FDIC's "problem" list is at its highest level in 18 years, and CBO therefore expects additional banks to fail in the next several years, contributing to tight credit conditions for households.

The weak state of mortgage finance also is likely to restrain the recovery of the housing market in the near term. Lending standards for home mortgages remain very strict, and borrowers with credit histories that are less than stellar continue to have trouble obtaining credit from the private market. Nevertheless, CBO expects a gradual improvement in private mortgage lending.

**Housing Vacancies and Household Formation.** The large number of vacant housing units is likely to restrain the recovery in spending on residential structures (see Figure 2-8). CBO estimates that there were roughly 2.3 million excess vacant housing units in the third quarter of 2010, an unusually large number.<sup>18</sup> CBO expects that eliminating that excess stock will take two more years, especially in light of the continuing problems in mortgage markets.

A slowdown in household formation (the rate at which individuals form separate households) has contributed to the slow recovery of the housing market by lowering the demand for housing. Household formation fell during the recession and has remained low. An average of 600,000 new households were added each year between the third quarter of 2007 and the third quarter of 2010, well below the average of 1.1 million households added annually over the previous 10 years. (The decline in household formation has also dampened consumption, because formation of a new household is usually accompanied by spending on furniture, appliances, and other goods and services.) Household formation is likely to return to a more normal rate as the growth in employment picks up.

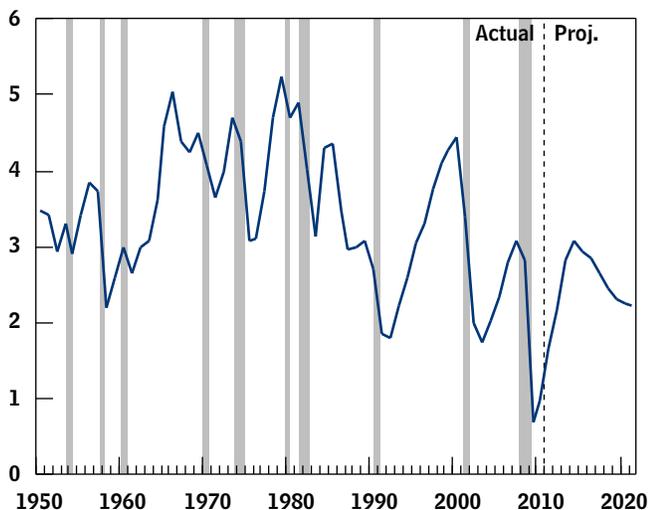
**Businesses**

The growth of business investment will remain strong in 2011 and 2012, CBO projects, reflecting the outsized decline in net business investment (that is, investment minus depreciation) during the recession, favorable

18. Excess vacant units are measured as the difference between the actual number of vacant units—including units for sale or for rent, second homes, and units held off the market for various reasons—and an estimate of the number that would be vacant under normal market conditions. The number of vacant units probably better reflects the excess supply of housing than does the total inventory of units for sale.

## Figure 2-9. Net Business Fixed Investment

(Percentage of gross domestic product)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: Business fixed investment (nonresidential structures and producers' durable equipment and software) is shown net of depreciation.

Data are annual and are plotted through 2021. The value for 2010 is estimated.

corporate profits, improving conditions in financial markets, and provisions in the 2010 tax act that encourage investment. Although business investment is only about 10 percent of GDP, CBO expects that investment to drive the recovery, accounting for about a third of the growth in real GDP during 2011 and 2012. Investment in producers' durable equipment and software is forecast to be the primary source of the growth in business investment, increasing by double digits in both years. CBO expects that investment in nonresidential structures will begin to recover in 2011 and grow more vigorously thereafter. Investment in structures is recovering more slowly than investment in equipment and software, not only because capacity utilization is low and commercial vacancy rates are high but also because problems in the financial sector have hit commercial real estate especially hard. Investment in inventories, which initially spurred the recovery, will probably provide less support in 2011 and 2012 now that it has returned to its prerecession share of GDP.

**Net Investment During the Recession.** The forecast of strong growth in investment reflects the steep decline in net investment during the recession (see Figure 2-9). For

example, net fixed investment by businesses (investment in plant, equipment, and software, minus depreciation) in 2009 was at its lowest level relative to GDP in 65 years. Net investment picked up a bit in 2010 but remains well below its long-run historical average. The slow but steady growth in GDP that CBO has projected for the next few years will encourage businesses to boost net investment to meet expected increases in demand and will require a sizable increase in investment from its current level.

**Corporate Profits and Credit Conditions.** Corporate profits are likely to continue to support business investment, CBO projects. Domestic profits have grown very rapidly over the past two years and are approaching their previous peak, reached in 2006. The recovery in profits was particularly dramatic in the financial sector, but a robust recovery also occurred in the nonfinancial sector. The growth of domestic profits slowed in the latter part of 2010, however, and CBO expects that growth will slow further in the near term, roughly stabilizing the share of GDI from profits at its current level for the next few years. That share will start to fall in 2013, CBO projects, as higher interest rates and a larger amount of corporate debt increase the projected interest costs of domestic businesses and as tightening in labor markets leads to stronger gains in employees' compensation.

Corporations also have a substantial amount of cash and short-term liquid holdings that they can give back to shareholders in the form of dividends or invest as the economy strengthens. Those holdings amounted to 12.2 percent of potential GDP at the end of the third quarter of 2010, exceeding their recent peak of 11.4 percent at the end of 2005. A combination of factors helped boost those holdings, including strong growth of profits and lower spending on investment.

Conditions in financial markets continue to improve and to support the economic activity of businesses. The differences (also known as spreads) between interest rates on short-term borrowing by businesses and rates on comparable government debt remain below long-term historical averages. Corporations, particularly those carrying riskier credit ratings, have taken advantage of historically low interest rates to refinance large amounts of debt; lower debt payments have also boosted cash holdings. Moreover, there are some signs that banks are beginning to relax lending standards and terms for commercial and industrial loans, and CBO expects that easing to continue.

**Figure 2-10.****Exchange Value of the U.S. Dollar**

(Index, March 1973 = 100)



Sources: Congressional Budget Office; Federal Reserve.

Notes: The index is a trade-weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners, adjusted for inflation. The index weights change over time.

Data are monthly and are plotted through December 2010.

**International Trade**

In CBO's forecast, real net exports (exports minus imports, each adjusted to remove price changes) contribute to real GDP growth in the next few years after subtracting from it for much of 2010. Real net exports increase this year because of the lagged effect of last year's strong rebound in foreign economies, spurring demand for U.S. goods and services. Net exports are also likely to rise because the value of the dollar has fallen significantly over the past two years and because the restocking of inventories by U.S. businesses will ease, in CBO's view, dampening the growth of imports. CBO also expects net exports' contribution to the economy to taper off after this year as the growth of foreign economies slows to a more normal rate.

**Growth of Income Abroad.** The momentum created by the strong rebound in foreign economic growth last year will continue for the next few years, though at a more moderate rate, CBO projects. The expansion of advanced economies is expected to continue, in part, because real GDP in several of those economies is still below its prerecession level. Even though investors remain con-

cerned about fiscal crises in some economies in the euro zone (namely, Greece, Ireland, Portugal, and Spain), growth in other economies of the euro zone, especially Germany, has remained strong.

As in the past few years, the growth in emerging economies is expected to outpace that in advanced economies.<sup>19</sup> The expansion in some emerging economies—such as China, Indonesia, and India—continued even as advanced economies contracted sharply in the wake of the global financial crisis. Several factors account for that contrast in growth: Emerging economies' banks were less directly exposed to the financial crisis than were banks in advanced countries; economic fundamentals in emerging economies provided more room for fiscal and monetary stimulus; and those economies have become less dependent on exports to advanced economies. Many of those emerging economies also received a boost from capital inflows because investments in advanced countries have been subject to low yields and higher-than-usual uncertainty.

**Exchange Value of the U.S. Dollar.** CBO expects that growth in U.S. net exports will also benefit from the sharp decline in the exchange value of the U.S. dollar over the past two years (see Figure 2-10). Under the weight of the large debt the United States owes to foreign entities, the dollar had declined for most of the past decade until the global financial crisis drove it up sharply in the second half of 2008.<sup>20</sup> Over the past two years, however, the dollar has fallen again, retracing that spike.

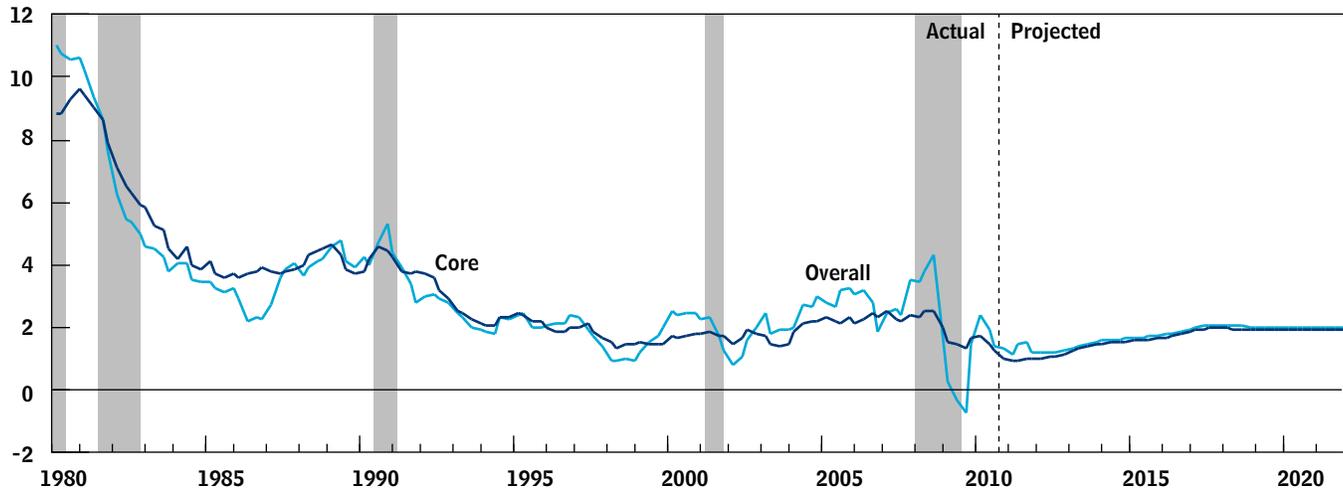
During 2010, the dollar responded to changing views about the debt problems of the governments in several euro-zone countries. It strengthened in the first half of the year when the problems surfaced, but then weakened as the problems appeared to ease. (News of the second

19. In 2008 and 2009, for example, growth of real GDP averaged about 9 percent in China and 6 percent in India. In contrast, real GDP contracted at an average annual rate of nearly 2 percent in the euro zone and about 3 percent in Japan during that period. Moreover, the recovery of advanced economies has been slower than that in emerging economies. In the first three quarters of 2010, the annualized growth rate of real GDP was about 2 percent in the euro zone and 5 percent in Japan, compared with about 19 percent in China, 13 percent in India, and 6 percent in Brazil.

20. The global financial crisis drove up the value of the dollar because heightened uncertainty and risk aversion sharply increased demand for U.S. Treasury securities, which were considered low-risk assets by most international investors.

**Figure 2-11.****Inflation**

(Percentage change in prices from previous year)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: The overall inflation measure is based on the price index for personal consumption expenditures; the core rate excludes prices for food and energy.

Data are quarterly. Actual data are plotted through the third quarter of 2010; projections are plotted through the fourth quarter of 2021.

round of large-scale asset purchases by the Federal Reserve—which caused many analysts to expect lower U.S. interest rates—may also have reduced the value of the dollar.) In the next few years, with ongoing uncertainty in the euro zone, forces pushing the dollar up and down appear roughly balanced. However, CBO expects that the dollar will continue to decline in the long run as part of an adjustment toward sustainable borrowing from foreigners.<sup>21</sup>

**Inflation**

In CBO's projections, price inflation remains very low. Inflation in consumer prices, as measured by the PCE price index, dropped from 3.5 percent over the four quarters of 2007 to an estimated 1.4 percent in 2010; it averages just 1.2 percent in 2011 and 1.3 percent in 2012 in CBO's forecast. Inflation in the core PCE price index, which excludes inflation in prices for food and energy, also remains very low, close to 1 percent through the end of 2012 (see Figure 2-11). The GDP price index will rise

0.9 percent in 2011 and 1.4 percent in 2012, CBO expects.

The principal factor behind CBO's forecast for low core inflation is the large amount of excess productive capacity (that is, underused labor and capital and vacant housing units) in the economy following the recession:

- The high rate of unemployment has dampened the growth in wages and salaries, an important cost of business. In late 2010, unit labor costs (wages and benefits per unit of output) in the nonfarm business sector had fallen 3.5 percent below their level in late 2008.
- Capacity utilization in manufacturing stood at about 73 percent in late 2010, up from a low of 65 percent in mid-2009 but well below its prerecession rate of about 80 percent.
- The large number of vacant houses and apartments has restrained the growth of rents, which make up a sizable share of consumer prices.

21. See Congressional Budget Office, *Will the U.S. Current Account Have a Hard or Soft Landing?* Issue Brief (June 2007).

Inflation has tended to slow during periods of excess capacity, and the decline in core inflation since 2007 is consistent with that historical pattern.<sup>22</sup>

In CBO's forecast, increases in the prices of energy and other commodities raise inflation slightly in the next few years. The price of crude oil rose from an average of about \$75 per barrel last summer to more than \$90 in mid-January. As a consequence, gasoline prices went up significantly in late 2010, and CBO projects that the rising price of crude oil will put additional upward pressure on the price of gasoline in 2011. In the past several decades, however, fluctuations in energy prices have had only a limited effect on core inflation, and CBO expects that rising energy prices will have little effect on core inflation in the next several years.<sup>23</sup> Food prices began to go up in late 2010, and CBO projects that rising prices for some agricultural commodities, such as corn and wheat, will continue to boost food prices in the near term. CBO expects, however, that the impact of rising food prices on core inflation also will be negligible.

Inflation in the prices of imported goods and services (excluding petroleum) will slightly increase core inflation in 2011, CBO projects. Import prices rose by about 2¾ percent in 2010, and CBO expects that the dollar's depreciation since mid-2010 will further boost import prices.

By 2016, with the economy having recovered to its potential, both overall and core inflation will stabilize at about 2 percent, CBO projects. The Federal Reserve generally considers a rate of consumer price inflation of about 2 percent, or slightly below, to be consistent with its mandate to maintain maximum employment and price stability.<sup>24</sup> CBO also projects that core inflation will be supported by the market's expectation that the Federal

Reserve will prevent that rate from continuing to decline and will ultimately allow inflation to rise toward its implicit target of about 2 percent.

Some analysts have expressed concern that the large amount of excess bank reserves resulting from the Federal Reserve's asset purchases will cause inflation to rise above the central bank's implicit target. The main concern is that the Federal Reserve will be too slow to remove that extra liquidity once borrowing and spending approach normal levels, pushing up inflation as spending exceeds potential output. However, CBO anticipates that the Federal Reserve will successfully reduce those reserves before inflation rises above its implicit target.

### Labor Markets

CBO expects employment, like output, to continue recovering gradually. Employment (and unemployment) during the recession and recovery have been affected by cyclical factors (those that relate to the state of the economy) and structural factors (for example, those that relate to a mismatch between the requirements of existing job openings and the characteristics of job seekers, such as their skills and geographic location).<sup>25</sup> In CBO's view, cyclical factors have been the larger determinant of unemployment. Consequently, CBO's projection of moderate employment growth depends primarily on its projection of moderate growth in output.

In CBO's projection, employment grows at an average annual rate of just under 2 percent (or about 2.5 million jobs per year) in the 2011–2016 period. The unemployment rate gradually falls in the near term—to 9.2 percent in the fourth quarter of 2011, 8.2 percent in the fourth quarter of 2012, and 7.4 percent at the end of 2013. By 2016 it reaches 5.3 percent, close to CBO's estimate of the natural rate of unemployment (5.2 percent). Even at CBO's projected growth of employment, which is similar to the average pace witnessed during the late 1990s, it would take until 2016 to make up for the employment

22. See James H. Stock and Mark W. Watson, *Modeling Inflation After the Crisis*, Working Paper No. 16488 (Cambridge, Mass.: National Bureau of Economic Research, October 2010).

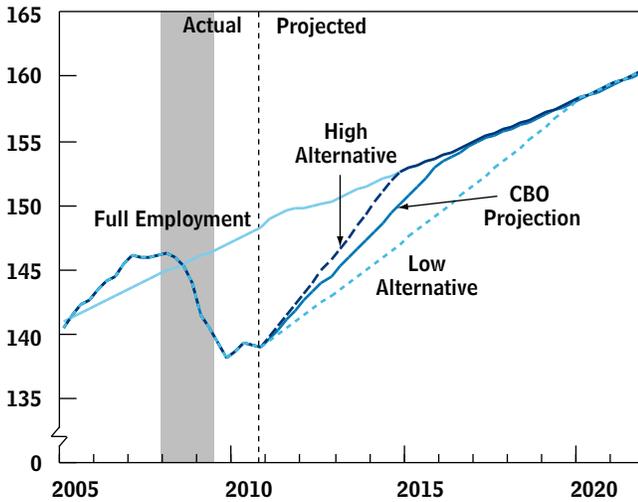
23. See Mark A. Hooker, "Are Oil Shocks Inflationary? Asymmetric and Nonlinear Specifications Versus Changes in Regime," *Journal of Money, Credit, and Banking*, vol. 34, no. 2 (May 2002), pp. 540–561.

24. See Ben S. Bernanke, "Monetary Policy Objectives and Tools in a Low-Inflation Environment" (speech given at the Revisiting Monetary Policy in a Low-Inflation Environment Conference, Federal Reserve Bank of Boston, October 15, 2010), [www.federalreserve.gov/newsevents/speech/bernanke20101015a.htm](http://www.federalreserve.gov/newsevents/speech/bernanke20101015a.htm).

25. The creation of new jobs may be further hindered by businesses' continued lack of confidence in the recovery's sustainability and by remaining limitations on access to credit. Businesses may also be unsure and concerned about how they will be affected by the implementation of recently enacted financial and health care legislation and by possible future changes in tax and other federal policies. Those uncertainties about future policies may be restraining hiring at some firms, but the magnitude of any such restraint is difficult to determine.

**Figure 2-12.****Possible Paths to Full Employment**

(Millions of people)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: Employment is civilian employment of people age 16 or older; data are from the Current Population Survey.

Full employment is the level of employment consistent with CBO's estimate of the natural rate of unemployment and its projection of the potential labor force.

The high and low alternatives assume that employment grows 0.5 percentage points faster and slower, respectively, during the recovery than is assumed in CBO's baseline forecast, in which employment grows at an average annual rate of just under 2 percent for the 2011–2016 period.

Data are quarterly and are plotted through the fourth quarter of 2021.

lost since the beginning of the recession and to accommodate the normal growth of the labor force (see Figure 2-12). If, instead, the growth in employment were slower by half a percentage point per year, the shortfall would not be closed until the end of 2019; if faster by half a percentage point per year, the shortfall would be closed by the end of 2014.

A number of changes have contributed to raising the measured unemployment rate, including the following:

- The prevalence of permanent job losses;
- The mismatch of skills between job seekers and existing job requirements;

- The difficulty of relocating owing to the troubled housing market; and
- The extension of unemployment insurance, which has encouraged some jobless people who might otherwise have left the labor force to instead remain in it (and, thus, to be counted as unemployed).

In contrast, exits from the labor force among people applying for and receiving income support from disability insurance have tended to decrease measured unemployment.

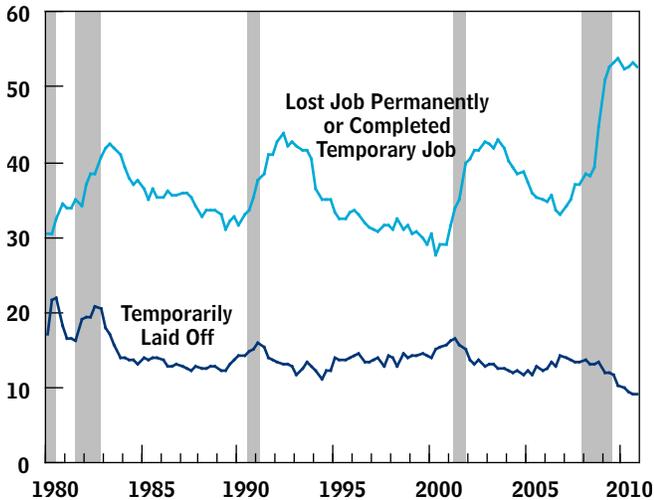
The share of unemployed workers whose job was permanently lost (or whose temporary job ended) has risen much more sharply in the past few years than during and following previous recessions and has dipped only slightly since late 2009 (see Figure 2-13). Moreover, workers on temporary layoffs have represented a smaller percentage of the unemployed than they did in previous downturns. Those developments suggest that gains in employment in the next several years will come, to a greater extent than usual, from the creation of new jobs. Consequently, the movement of unemployed workers into employment will probably continue to be more difficult in this recovery than in past ones. Many of those jobs will be with different businesses in different industries and locations and will require workers with different skills than those needed for the jobs that have disappeared.

The reemployment of unemployed workers will also be more difficult in this recovery because, to improve productivity, some employers may have responded to the recession by increasing the skills required of their workforce. In such cases, unemployed workers may not be able to return to a job in the same industry, even once the industry starts to expand again, because their skills have become obsolete. Some workers may remain unemployed for a long period because the process of acquiring new skills can take considerable time.

Workers who are unemployed for long periods may face even greater obstacles in finding a new job. Long-term unemployment reached an unprecedented level in the past few years; the percentage of people in the labor force who have been unemployed for longer than 26 weeks has risen far higher than at any time in the past 60 years. Some employers may assume that long-term unemployment is a signal that a worker is not good at his or her job. In addition, workers unemployed for long periods

### Figure 2-13. People Who Have Lost Their Job

(Percentage of all unemployed people)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: Unemployed people are those who have lost or quit their job, are seeking a first job, or are aiming to return to the labor force after an absence.

Data are quarterly and are plotted through the fourth quarter of 2010.

are more likely to be unfamiliar with the latest technologies and, because of a diminished social network, may know less about job opportunities.

The combined effects of long-term unemployment and skill mismatches have contributed modestly to the rise in the unemployment rate, CBO estimates, and will continue to boost the unemployment rate in the next several years. Those effects are expected to diminish by 2016 but not disappear. Some workers who have been unemployed for a long time, especially those displaced from long-tenured jobs, are likely to face difficulty landing another stable job. Thus, as long as they remain in the labor force, they could experience additional periods of unemployment. That is especially true for occupations, such as construction work, for which demand is projected to be permanently lower. As a consequence, CBO has raised its estimate of the natural rate of unemployment in this projection from 5.0 percent to 5.2 percent.

Furthermore, the sharp reduction in house prices, which left many homeowners owing more on their mortgage than their home is worth, may be making relocation more difficult than usual.<sup>26</sup> Any such immobility can

prevent unemployed workers from finding potential employers. The unemployment rates in different states vary greatly; some states that were hit hardest by the bursting of the housing bubble (such as California and Nevada) continue to have unemployment rates that are much higher than those of other states. The extent to which workers' immobility contributes to the current high unemployment rate nationally is probably small because demand for labor is still weak in so many parts of the country. Immobility could play a larger role when the demand for labor strengthens in some areas, but CBO does not expect it to permanently distort the labor market.

The labor market has also been affected by the extensions of unemployment insurance benefits enacted in the past few years. Those extensions have effects on the unemployment rate that work in opposite directions. On the one hand, those extensions have encouraged some people to stay in the labor force and collect benefits when they would otherwise have left. The extensions also have reduced the intensity of some workers' efforts to search for a new job because the benefits reduce the hardship of being unemployed.<sup>27</sup> Those effects of the benefit extensions tend to increase the unemployment rate.

On the other hand, other effects tend to lower the unemployment rate. For example, the benefit extensions have also led to greater spending by the recipients and thereby greater demand for goods and services in the economy as a whole. In addition, because the labor market is especially weak in the current recovery, jobs that are not sought by workers receiving unemployment benefits may go instead to individuals who are not eligible for those benefits (such as new entrants to the labor force) and who might otherwise be unemployed themselves. Also, an extension of unemployment benefits might allow workers

26. Homeowners who owe more on their mortgage than their house is worth may be less likely to move. See Fernando Ferreira, Joseph Gyourko, and Joseph Tracy, "Housing Busts and Household Mobility," *Journal of Urban Economics*, vol. 68, no. 1 (July 2010), pp. 34–45; and Sam Schulhofer-Wohl, *Negative Equity Does Not Reduce Homeowners' Mobility*, Working Paper No. 16701 (Cambridge, Mass.: National Bureau of Economic Research, January 2011).

27. See Daniel Aaronson, Bhashkar Mazumder, and Shani Schechter, "What Is Behind the Rise in Long-Term Unemployment?" *Economic Perspectives*, vol. 34, 2nd quarter (Federal Reserve Bank of Chicago, 2010); and Rob Valletta and Katherine Kuang, "Extended Unemployment and UI Benefits," *Economic Letter*, No. 12 (Federal Reserve Bank of San Francisco, April 19, 2010).

to find a job that better suits their skills or to move to a more promising location or occupation.

In CBO's assessment, the spending associated with the extensions of unemployment insurance benefits will result in somewhat higher employment in 2011. Nonetheless, the unemployment rate will also be slightly higher because more people will remain in the labor force.

Another factor affecting the decisions of jobless workers is the Social Security Disability Insurance (DI) program, which is expected to slightly reduce the unemployment rate through 2016. For workers with health problems who lost their job during the recession and face at best uncertain prospects for reemployment, seeking DI benefits is a potentially attractive option. In most cases, acceptance into the DI program removes people from the labor force earlier than they would otherwise have retired. Because those who applied for DI benefits in response to the recession had in many cases already lost their job, and because they tended to have below-average educational attainment and skills—characteristics associated with higher average rates of unemployment—their absence from the labor force reduces the unemployment rate. However, it also reduces the potential labor force, employment, and potential output.

## The Outlook for 2017 Through 2021

CBO's economic projections for the period beyond 2016 are based on trends in the factors that underlie potential output, including growth in the labor force, the rate of capital accumulation, and growth in productivity. The projections therefore do not explicitly incorporate fluctuations resulting from the business cycle. Instead, CBO assumes that the likelihood of a boom or recession during the latter years of the projection period is about the same as it has been since World War II. The projections do, however, take into account the likely effects that current-law fiscal policy will have on the factors governing the growth of potential output; they also reflect the evolution of interest rates and other economic measures.

Growth in real GDP averages 2.4 percent annually during the 2017–2021 period in CBO's projection, a pace that matches the growth in potential GDP over the same period and is slightly higher than that for the whole 10-year period. The unemployment rate averages 5.2 percent for the 2017–2021 period, the same as CBO's

estimate of the natural rate of unemployment. Inflation, as measured by the PCE price index, averages 2.0 percent over the five-year period in CBO's projection, as does the core PCE price index. The interest rates on 3-month Treasury bills and 10-year Treasury notes average 4.4 percent and 5.4 percent, respectively, during those years.

## Potential Output

Potential output will grow at a rate of 2.4 percent between 2017 and 2021, CBO projects (see Table 2-2). That rate is close to the 2.3 percent potential growth expected for the entire 2011–2021 period but substantially below its average of 3.3 percent since 1950. That difference arises largely because CBO anticipates a slowdown in the growth of the potential labor force during the 10-year period but also because CBO expects capital accumulation and productivity growth to be slightly slower during the next 10 years than they were during the previous 60 years.

In CBO's projection, growth in the potential labor force averages 0.7 percent annually during the 2011–2021 period, which is about half of the average growth rate of the potential labor force since 1950. That tempered pace stems primarily from slower population growth in recent years and a decline in expected labor force participation during the next decade, mainly because the large cohort of workers born during the postwar baby boom will begin to retire. Policy changes incorporated in current law are also expected to slow the expansion of the labor supply during the next 10 years. Those changes—including the expiration of the various tax cuts that the 2010 tax act extended through 2012 and provisions limiting the impact of the alternative minimum tax—will raise marginal personal tax rates during the next decade relative to what they were in the past decade and will thereby modestly reduce people's incentive to work. In addition, CBO expects that the major health care legislation enacted in 2010 will reduce the supply of labor slightly.<sup>28</sup>

The rates of growth for the capital services index and potential total factor productivity are a little below their historical averages in CBO's projection. In particular, the capital services index (a measure of how much the stock of physical capital contributes to the flow of production) rises at an average annual rate of 3.6 percent between 2011 and 2021, about three-tenths of a percentage point

28. See Congressional Budget Office, *The Budget and Economic Outlook: An Update* (August 2010), Box 2-1, pp. 48–49.

**Table 2-2.****Key Assumptions in CBO's Projection of Potential Output**

(By calendar year, in percent)

	Average Annual Growth					Total, 1950- 2010	Projected Average Annual Growth		
	1950- 1973	1974- 1981	1982- 1990	1991- 2001	2002- 2010		2011- 2016	2017- 2021	Total, 2011- 2021
<b>Overall Economy</b>									
Potential Output	3.9	3.2	3.1	3.1	2.4	3.3	2.2	2.4	2.3
Potential Labor Force	1.6	2.5	1.6	1.2	0.9	1.5	0.7	0.7	0.7
Potential Labor Productivity <sup>a</sup>	2.3	0.7	1.5	1.9	1.5	1.8	1.5	1.7	1.6
<b>Nonfarm Business Sector</b>									
Potential Output	4.0	3.5	3.3	3.5	2.7	3.6	2.6	2.8	2.7
Potential Hours Worked	1.4	2.3	1.6	1.2	0.6	1.4	0.6	0.7	0.7
Capital Services	3.8	4.3	4.1	4.7	2.6	3.9	3.6	3.5	3.6
Potential TFP	1.9	0.7	0.9	1.3	1.5	1.4	1.1	1.2	1.2
Potential TFP excluding adjustments	1.9	0.7	0.9	1.2	1.2	1.3	1.2	1.2	1.2
Total adjustments	0	0	0	0.1	0.3	*	-0.1	0	**
Effects of the recession <sup>b</sup>	0	0	0	0	*	*	-0.1	0	**
Temporary adjustment <sup>c</sup>	0	0	0	0.1	0.3	0.1	0	0	0
<b>Contributions to the Growth of Potential Output in the Nonfarm Business Sector (Percentage points)</b>									
Potential Hours Worked	0.9	1.6	1.1	0.8	0.4	1.0	0.4	0.5	0.5
Capital Input	1.2	1.3	1.2	1.4	0.8	1.2	1.1	1.0	1.1
Potential TFP	<u>1.9</u>	<u>0.7</u>	<u>0.9</u>	<u>1.3</u>	<u>1.5</u>	<u>1.4</u>	<u>1.1</u>	<u>1.2</u>	<u>1.2</u>
Total Contributions	4.0	3.5	3.3	3.5	2.7	3.5	2.6	2.8	2.7
<b>Memorandum:</b>									
Potential Labor Productivity in the Nonfarm Business Sector <sup>d</sup>	2.6	1.3	1.6	2.3	2.1	2.2	2.0	2.0	2.0

Source: Congressional Budget Office.

Note: TFP = total factor productivity; \* = between zero and 0.05 percent; \*\* = between -0.05 percent and zero.

- The ratio of potential output to the potential labor force.
- An adjustment to reflect the effects of the recession on potential output, beyond its impact on capital accumulation and labor supply.
- An adjustment for the unusually rapid growth of TFP between 2001 and 2003.
- The ratio of potential output to potential hours worked in the nonfarm business sector.

below its average growth rate since 1950. Two factors account for that slower growth: The higher federal debt is likely to displace some private capital, and slower projected growth in the labor force means that smaller increases in the stock of plant and equipment will be required to equip the workforce with the same amount of capital per worker.

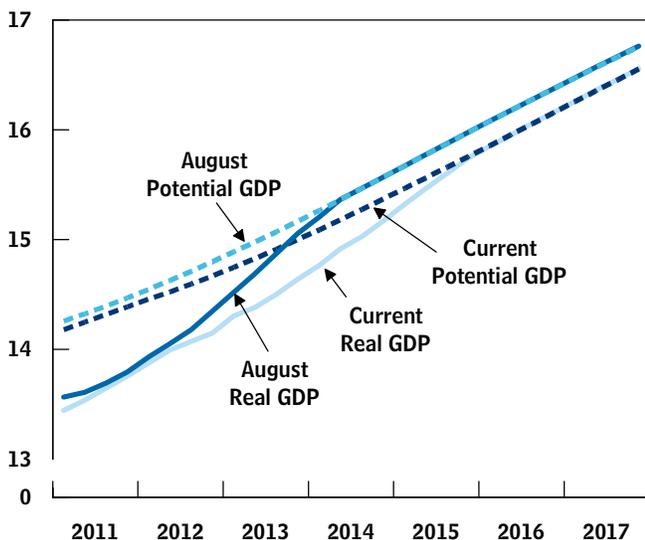
In CBO's projections, various measures of productivity growth are lower for the 10-year period than they were

for the entire postwar period. Projected growth of potential total factor productivity (the average real output per unit of combined labor and capital services) is slightly lower—1.2 percent compared with 1.4 percent on average since 1950. The growth of potential labor productivity (the average real output per hour of labor) in the nonfarm business sector is projected to be 2.0 percent annually for the 2011–2021 period, also about two-tenths of a percentage point lower than its historical rate.

**Figure 2-14.**

## Current and August 2010 Forecasts of Real and Potential Gross Domestic Product

(Trillions of 2005 dollars)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Notes: Real gross domestic product (GDP) is the output of the economy adjusted to remove the effect of inflation.

Potential GDP is CBO's estimate of the output the economy would produce with a high rate of use of its capital and labor resources.

Projections shown for the current (January 2011) forecast incorporate the July 2010 revisions to the national income and product accounts, whereas projections for the August 2010 forecast do not.

Data are quarterly and are plotted through the fourth quarter of 2017.

### Inflation, Unemployment, and Interest Rates

Inflation in CBO's projections, as measured by the PCE price index and the core PCE price index, averages 2.0 percent annually during the 2017–2021 period. As measured by the CPI-U, inflation is slightly higher, at 2.3 percent, during that period. The difference between the rates stems from the way that changes in prices for individual goods and services are combined in each of the price indexes. CBO assumes that inflation in the 2017–2021 period will be determined generally by monetary policy and that the Federal Reserve will succeed in maintaining the rate of inflation in consumer prices at about 2 percent.

The average rate of unemployment projected for the 2017–2021 period is the same as CBO's estimate of the natural rate of unemployment—5.2 percent.

In CBO's projection, the rates on 3-month Treasury bills and 10-year Treasury notes average 4.4 percent and 5.4 percent, respectively, during the latter half of the projection period.

### Comparison with CBO's August 2010 Forecast

CBO's economic outlook has changed since the agency prepared its previous forecast, in August 2010, owing largely to enactment of the 2010 tax act in December (see Table 2-3). Compared with CBO's August projections, policy changes contribute to higher growth of real GDP in 2011 but slower growth from 2012 to 2014, as the fiscal stimulus wanes. In addition to incorporating a revised path for policy, CBO's new forecast incorporates updated estimates of how much the financial crisis may continue to restrain economic activity. As a consequence, the gap between real GDP and potential GDP does not close until 2016, two years later than in the August forecast (see Figure 2-14).

The unemployment rate is higher throughout the projection period in this forecast than in the previous one. That difference reflects three factors: demand for labor in the near term that is weaker than had been expected; the slower closing of the output gap in the current forecast; and the boost to CBO's estimate of the natural rate of unemployment.

Interest rates are generally lower in the current forecast than in CBO's August projection. Short-term rates in 2011 and 2012 are just slightly higher than in the August forecast. In contrast, long-term rates are lower in 2011 and 2012 than in CBO's August projection, by 0.1 percentage point and 0.3 percentage points, respectively. After 2012, short- and long-term rates are below those previously forecast by at least 0.5 percentage points. That change reflects three interrelated factors: the higher unemployment rate in the next few years; evidence from forward interest rates (interest rates that are set now for loans that will occur in the future) that financial markets expect rates to remain low for an extended period; and evidence that foreign investors continue to be willing to increase their U.S. asset holdings despite the current low interest rates and some concerns about greater exposure to the risk that the dollar will depreciate.

**Table 2-3.****CBO's Current and Previous Economic Projections for Calendar Years 2010 to 2020**

	Estimated, 2010	Forecast		Projected Annual Average	
		2011	2012	2013-2016	2017-2020
<b>Year to Year (Percentage change)</b>					
Real GDP					
January 2011	2.8	2.7	3.1	3.4	2.4
August 2010	3.0	2.1	3.4	3.5	2.3
Real Potential GDP					
January 2011	1.7	1.9	2.0	2.4	2.4
August 2010	1.6	1.8	2.2	2.5	2.3
PCE Price Index					
January 2011	1.8	1.3	1.2	1.7	2.0
August 2010	1.5	1.0	1.3	1.8	2.0
Consumer Price Index <sup>a</sup>					
January 2011	1.6 <sup>b</sup>	1.6	1.3	1.9	2.3
August 2010	1.6	1.0	1.4	2.1	2.3
GDP Price Index					
January 2011	0.9	0.9	1.3	1.7	2.0
August 2010	0.8	1.0	1.2	1.8	2.0
Nominal GDP					
January 2011	3.8	3.7	4.4	5.1	4.5
August 2010	3.8	3.1	4.7	5.4	4.4
Employment Cost Index <sup>c</sup>					
January 2011	1.8	2.1	2.3	2.9	3.5
August 2010	1.5	2.1	2.6	3.7	3.3
<b>Calendar Year Average</b>					
Interest Rates (Percent)					
Three-month Treasury bill					
January 2011	0.1 <sup>b</sup>	0.3	1.1	3.6	4.4
August 2010	0.2	0.2	1.1	4.3	5.0
Ten-year Treasury note					
January 2011	3.2 <sup>b</sup>	3.4	3.8	4.7	5.4
August 2010	3.4	3.5	4.1	5.4	5.9
Unemployment Rate (Percent)					
January 2011	9.6 <sup>b</sup>	9.4	8.4	6.4	5.2
August 2010	9.5	9.0	8.1	5.5	5.0
Nominal GDP (Billions of dollars)					
January 2011	14,649	15,184	15,858	19,362 <sup>d</sup>	23,062 <sup>e</sup>
August 2010	14,804	15,262	15,974	19,730 <sup>d</sup>	23,398 <sup>e</sup>

Continued

Table 2-3.

Continued

### CBO's Current and Previous Economic Projections for Calendar Years 2010 to 2020

	Estimated, 2010	Forecast		Projected Annual Average	
		2011	2012	2013–2016	2017–2020
<b>Calendar Year Average (Continued)</b>					
Tax Bases (Billions of dollars)					
Domestic economic profits					
January 2011	1,234	1,308	1,355	1,515 <sup>d</sup>	1,601 <sup>e</sup>
August 2010	1,326	1,342	1,406	1,493 <sup>d</sup>	1,572 <sup>e</sup>
Wages and salaries					
January 2011	6,403	6,702	7,070	8,710 <sup>d</sup>	10,417 <sup>e</sup>
August 2010	6,415	6,629	7,076	8,946 <sup>d</sup>	10,644 <sup>e</sup>
Tax Bases (Percentage of GDP)					
Domestic economic profits					
January 2011	8.4	8.6	8.5	8.1	7.2
August 2010	9.0	8.8	8.8	8.3	7.0
Wages and salaries					
January 2011	43.7	44.1	44.6	44.8	45.1
August 2010	43.3	43.4	44.3	45.0	45.5

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve.

Notes: Percentage changes are measured from one year to the next.

GDP = gross domestic product; PCE = personal consumption expenditures.

- a. The consumer price index for all urban consumers.
- b. Actual value for 2010.
- c. The employment cost index for wages and salaries of workers in private industry.
- d. Value for 2016.
- e. Value for 2020.

Inflation, as measured by the growth in the PCE price index, is higher in 2011 in the current forecast, primarily because prices for energy and commodities are higher than had been expected, but CBO anticipates that those effects will moderate after 2011. CBO expects inflation to be about 0.1 percentage point lower on average from 2012 to 2016 than in the August forecast. In both forecasts, inflation converges to 2.0 percent—the Federal Reserve's implicit target rate—after 2016.

The changes since August in CBO's forecasts of the two most important tax bases—wages and salaries, and domestic economic profits—are relatively small. Wages and salaries are about 1 percent—or around \$70 billion—higher in 2011 than in the summer forecast, largely because CBO has incorporated new data about wages and salaries for the first half of 2010 from the national income and product accounts. The near-term

forecast for growth in wages and salaries is somewhat lower than in the summer forecast; as a result, their level in 2012 is little changed. By contrast, the revisions to the national income and product accounts led CBO to lower its estimate of domestic economic profits by about \$90 billion in 2010. In CBO's current forecast, those profits are about \$50 billion—or 0.3 percentage points of GDP—lower for 2012 than they were in August. By 2020, wages and salaries are about 0.3 percentage points of GDP lower than in the August forecast, and domestic economic profits are 0.2 percentage points of GDP higher. For the whole period, CBO now projects that wages and salaries will be \$1.8 trillion lower during the 2011–2020 period than projected in August.

The 10-year projections for both hours worked and capital accumulation are slightly higher than in the August 2010 report. In addition, CBO has revised its estimate of

the natural rate of unemployment from 5.0 percent to 5.2 percent, largely because of its analysis of the effects of the recent recession on the labor market. Some of those effects are likely to persist even after the output gap has closed.

## Comparison with Other Forecasts

CBO also compared its projections with the *Blue Chip* consensus forecast (most recently published in January) and the Federal Reserve's forecasts (from the November 2010 meeting of the Federal Open Market Committee). The Federal Reserve reports two sets of forecasts—a range (reflecting the forecasts of the members of the Board of Governors and the presidents of the Federal Reserve Banks) and a central tendency (the range minus the three highest and three lowest projections). Despite differences in some specific projections, the three outlooks for economic growth this year and next embody continuing recovery with a moderate increase in real output, a modest decrease in the unemployment rate, and small changes in inflation (see Tables 2-4 and 2-5).

CBO's projections for real GDP growth are below those of the *Blue Chip* consensus for 2011 and 2012. The relative strength of the *Blue Chip*'s January forecasts compared with those of CBO largely reflects the economic news—movements in interest rates and other financial market indicators and the release of new data—since CBO completed its forecast in early December. Such news probably caused the *Blue Chip*'s January forecast to show faster real GDP growth in 2011 than was reported in its December survey (the *Blue Chip* did not include forecasts for 2012 before its January release).

CBO's forecast for real GDP growth in 2011 (and in 2013) is at the low end of the Federal Reserve's central tendency. By contrast, CBO's forecast for 2012 is below the central tendency and is at the low end of the full range of the Federal Reserve's forecasts.

Apart from differences in the economic news available at the time various forecasts were completed, other forecasters also may have used assumptions about fiscal policy that differ from those built into CBO's forecast. For example, CBO's forecast reflects the expected impact of the 2010 tax act on macroeconomic activity, whereas the

forecasts prepared by the Federal Reserve in early November may have been based on different assumptions about the legislative actions the Congress would take in December and beyond. Although the private forecasters surveyed in the January *Blue Chip* probably incorporated December's legislative actions, those forecasts may have included additional changes in fiscal policy that were not enacted and thus are not reflected in CBO's projections.

Consistent with its slightly weaker forecasts for output, CBO's forecast for the unemployment rate lies near the high end of the Federal Reserve's central tendency through 2012. CBO's forecast for the unemployment rate is the same as that of the *Blue Chip* consensus in 2011. However, although its forecasts for output are lower than those of the *Blue Chip* for 2011 and 2012, CBO's forecast for the unemployment rate in 2012, at 8.4 percent, is lower than the *Blue Chip*'s forecast of 8.7 percent.

CBO's forecasts of inflation in both 2011 and 2012 are lower than those of the *Blue Chip* consensus, whether measured in terms of the CPI-U or the price index for GDP. The *Blue Chip*'s forecast of higher inflation may reflect, in part, its stronger projections for demand. Other forecasters also may put less weight on the restraining influence of spare capacity on pricing behavior and may assume that potential output is lower than CBO estimates, which would imply that less spare capacity exists in the economy.

In CBO's forecast, inflation is closer to the rate reported by the Federal Reserve for the 2011–2013 period. The PCE price index and core PCE price index lie within the central tendency reported by the Federal Reserve for 2011 and are close to the midpoint of those forecasts for 2012 and 2013.

The interest rates on short-term Treasury securities that CBO forecasts for 2011 and 2012 are very similar to those of the *Blue Chip*. CBO's forecasts for long-term Treasury securities are similar to those of the *Blue Chip* for 2011 but are markedly lower for 2012. Reflecting stronger average forecasts of real growth and higher average forecasts of inflation, the *Blue Chip* consensus now expects 10-year rates to average 4.2 percent in 2012 compared with CBO's forecast of 3.8 percent. The Federal Reserve does not publish its forecasts of interest rates.

**Table 2-4.****Comparison of Economic Projections by CBO and the *Blue Chip* Consensus for Calendar Years 2010 to 2012**

	Estimated, 2010	2011	2012
<b>Fourth Quarter to Fourth Quarter (Percentage change)</b>			
Real GDP			
CBO	2.5	3.1	2.8
<i>Blue Chip</i>	2.8	3.3	3.2
Consumer Price Index <sup>a</sup>			
CBO	1.2 <sup>b</sup>	1.3	1.3
<i>Blue Chip</i>	1.1	1.8	2.0
GDP Price Index			
CBO	1.3	0.9	1.4
<i>Blue Chip</i>	1.6	1.5	1.7
Nominal GDP			
CBO	3.8	4.1	4.3
<i>Blue Chip</i>	4.4	4.8	5.0
<b>Calendar Year Average (Percent)</b>			
Interest Rates (Percent)			
Three-month Treasury bill			
CBO	0.1 <sup>b</sup>	0.3	1.1
<i>Blue Chip</i>	0.1 <sup>b</sup>	0.3	1.2
Ten-year Treasury note			
CBO	3.2 <sup>b</sup>	3.4	3.8
<i>Blue Chip</i>	3.2 <sup>b</sup>	3.5	4.2
Unemployment Rate (Percent)			
CBO	9.6 <sup>b</sup>	9.4	8.4
<i>Blue Chip</i>	9.6 <sup>b</sup>	9.4	8.7

Sources: Congressional Budget Office; Aspen Publishers, Inc., *Blue Chip Economic Indicators* (January 10, 2011).

Notes: The *Blue Chip* consensus is the average of about 50 forecasts by private-sector economists.

GDP = gross domestic product.

a. The consumer price index for all urban consumers.

b. Actual value for 2010.

**Table 2-5.****Comparison of Forecasts by CBO and the Federal Reserve for Calendar Years 2010 to 2013**

	Estimated, 2010	2011	2012	2013
		<b>Fourth Quarter to Fourth Quarter (Percentage change)</b>		
Real GDP				
CBO	2.5	3.1	2.8	3.5
Federal Reserve				
Range	2.3 to 2.5	2.5 to 4.0	2.6 to 4.7	3.0 to 5.0
Central tendency	2.4 to 2.5	3.0 to 3.6	3.6 to 4.5	3.5 to 4.6
PCE Price Index				
CBO	1.4	1.2	1.3	1.5
Federal Reserve				
Range	1.1 to 1.5	0.9 to 2.2	0.6 to 2.2	0.4 to 2.0
Central tendency	1.2 to 1.4	1.1 to 1.7	1.1 to 1.8	1.2 to 2.0
Core PCE Price Index <sup>a</sup>				
CBO	1.0	1.0	1.2	1.5
Federal Reserve				
Range	0.9 to 1.4	0.7 to 2.0	0.6 to 2.0	0.5 to 2.0
Central tendency	1.0 to 1.1	0.9 to 1.6	1.0 to 1.6	1.1 to 2.0
		<b>Average Level, Fourth Quarter (Percent)</b>		
Unemployment Rate				
CBO	9.6 <sup>b</sup>	9.2	8.2	7.4
Federal Reserve				
Range	9.4 to 9.8	8.2 to 9.3	7.0 to 8.7	5.9 to 7.9
Central tendency	9.5 to 9.7	8.9 to 9.1	7.7 to 8.2	6.9 to 7.4

Sources: Congressional Budget Office; Board of Governors of the Federal Reserve System, "Summary of Economic Projections for the Meeting of November 2–3, 2010" (November 23, 2010), [www.federalreserve.gov/monetarypolicy/files/fomcminutes20101103.pdf](http://www.federalreserve.gov/monetarypolicy/files/fomcminutes20101103.pdf).

Notes: The range of estimates from the Federal Reserve reflects the forecasts of the members of the Board of Governors and the presidents of the Federal Reserve Banks. The central tendency is the range omitting the three highest and three lowest projections.

GDP = gross domestic product; PCE = personal consumption expenditures.

a. Excludes prices for food and energy.

b. Actual value for 2010.

## The Spending Outlook

In the Congressional Budget Office's (CBO's) baseline projections, federal outlays total \$3.7 trillion in 2011, about \$250 billion (or 7 percent) more than the amount recorded for 2010. Those outlays equal an estimated 24.7 percent of gross domestic product (GDP), a larger share than last year and well above the 20.8 percent average share of the past 40 years. As the economy expands in the next few years, federal spending is projected to decline modestly relative to GDP through 2014 before turning up again—averaging 23.5 percent of GDP over the next decade, under the assumptions that govern baseline projections.<sup>1</sup>

The 7 percent growth in total outlays projected for 2011 is about the same as the average annual growth witnessed over the 2000–2009 period. That growth in outlays is driven primarily by spending on programs governed by permanent law (known as mandatory spending); such outlays are projected to rise to \$2.1 trillion this year from the \$1.9 trillion recorded for 2010 (see Table 3-1). Part of that increase stems from the time pattern of adjustments to the original estimates of the cost of the Troubled Asset Relief Program (TARP). In 2010, the Treasury made a significant accounting adjustment to reflect lower expected costs for the TARP; that adjustment reduced 2010 outlays by more than \$100 billion. An adjustment of the same magnitude is not expected in 2011. In addition, in 2010, the deposit insurance program received advance payments from banks for premiums that would have otherwise been made in later years (about \$35 billion, which were recorded as negative outlays); those payments will not recur, causing net outlays for that program in 2011 to be higher than last year's amounts. Other

components of mandatory spending also are projected to increase, on net, in 2011.

Discretionary spending, which is controlled by annual appropriation acts, is projected to be nearly \$1.4 trillion in 2011 under current law, only slightly above last year's total. Although discretionary programs are currently operating under a continuing resolution, which generally holds funding for 2011 at the levels provided for 2010, CBO projects higher outlays in 2011 stemming from appropriations provided in prior years that have not yet been spent.<sup>2</sup> Lastly, payments for net interest are expected to rise from \$197 billion in 2010 to \$225 billion in 2011 as the federal debt continues its rapid ascent. (See Box 3-1 for descriptions of the three major types of federal spending.)

For 2012, CBO's budgetary baseline projection shows federal spending dipping by 1.4 percent, falling from \$3.71 trillion to \$3.66 trillion. Some of that swing occurs because the first day of fiscal year 2012 (October 1, 2011) falls on a weekend, so certain payments will be made in fiscal year 2011 instead of 2012; adjusted for those timing shifts, spending would grow by 6.4 percent in 2011 and by 0.3 percent in 2012. In addition, spending growth in 2012 will be restrained under current law by the expiration of provisions that temporarily boosted outlays for unemployment compensation and Medicaid, the waning of outlays funded by the American Recovery and Reinvestment Act (ARRA, Public Law 111-5), and a large scheduled drop in Medicare's payment rates for physicians.

In CBO's baseline projections for 2013 through 2021, spending rises by 5.1 percent per year, on average.

1. In this report, spending generally refers to outlays, which are the disbursement of federal government funds. Funding (in the form of budget authority or obligation limitations) refers to the authority provided by law to incur financial obligations, which ultimately result in outlays.

2. Discretionary funding for 2011 is provided through March 4 by the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (Public Law 111-322).

**Table 3-1.**  
**CBO's Baseline Projections of Outlays**

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
<b>In Billions of Dollars</b>														
Mandatory														
Social Security	701	727	761	799	842	889	940	997	1,059	1,126	1,196	1,267	4,231	9,876
Medicare	520	572	566	610	645	679	738	771	806	885	949	1,021	3,238	7,670
Medicaid	273	274	264	278	329	371	416	447	474	508	544	587	1,659	4,219
Other spending	600	726	657	641	616	647	692	698	701	748	767	796	3,253	6,963
Offsetting receipts	-184	-191	-211	-222	-230	-240	-249	-267	-285	-302	-317	-338	-1,151	-2,659
Subtotal	1,910	2,108	2,038	2,106	2,203	2,346	2,538	2,647	2,757	2,964	3,138	3,333	11,230	26,070
Discretionary														
Defense	689	712	710	725	738	752	773	787	801	827	848	869	3,698	7,830
Nondefense	660	663	643	638	640	645	653	666	680	697	714	731	3,219	6,707
Subtotal	1,349	1,375	1,352	1,364	1,378	1,397	1,426	1,453	1,482	1,524	1,562	1,600	6,917	14,538
Net Interest	197	225	264	325	394	459	527	592	646	697	751	792	1,969	5,447
<b>Total</b>	<b>3,456</b>	<b>3,708</b>	<b>3,655</b>	<b>3,794</b>	<b>3,975</b>	<b>4,202</b>	<b>4,491</b>	<b>4,691</b>	<b>4,885</b>	<b>5,185</b>	<b>5,451</b>	<b>5,726</b>	<b>20,117</b>	<b>46,055</b>
On-budget	2,901	3,210	3,073	3,150	3,294	3,481	3,730	3,884	4,029	4,276	4,485	4,702	16,727	38,103
Off-budget	555	498	581	644	682	721	761	807	856	909	966	1,024	3,390	7,952
<b>As a Percentage of Gross Domestic Product</b>														
Mandatory														
Social Security	4.8	4.8	4.9	4.9	4.9	4.9	4.9	5.0	5.1	5.1	5.2	5.3	4.9	5.0
Medicare	3.6	3.8	3.6	3.7	3.7	3.7	3.9	3.8	3.9	4.0	4.2	4.3	3.7	3.9
Medicaid	1.9	1.8	1.7	1.7	1.9	2.0	2.2	2.2	2.3	2.3	2.4	2.5	1.9	2.2
Other spending	4.1	4.8	4.2	3.9	3.6	3.6	3.6	3.5	3.3	3.4	3.4	3.3	3.8	3.5
Offsetting receipts	-1.3	-1.3	-1.3	-1.4	-1.3	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.4	-1.3	-1.4
Subtotal	13.2	14.0	13.0	12.8	12.8	12.9	13.3	13.2	13.2	13.6	13.8	14.0	13.0	13.3
Discretionary														
Defense	4.7	4.7	4.5	4.4	4.3	4.1	4.0	3.9	3.8	3.8	3.7	3.6	4.3	4.0
Nondefense	4.5	4.4	4.1	3.9	3.7	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3.7	3.4
Subtotal	9.3	9.1	8.6	8.3	8.0	7.7	7.4	7.3	7.1	7.0	6.8	6.7	8.0	7.4
Net Interest	1.4	1.5	1.7	2.0	2.3	2.5	2.8	3.0	3.1	3.2	3.3	3.3	2.3	2.8
<b>Total</b>	<b>23.8</b>	<b>24.7</b>	<b>23.3</b>	<b>23.1</b>	<b>23.0</b>	<b>23.1</b>	<b>23.5</b>	<b>23.4</b>	<b>23.3</b>	<b>23.7</b>	<b>23.9</b>	<b>24.0</b>	<b>23.2</b>	<b>23.5</b>
On-budget	20.0	21.4	19.6	19.2	19.1	19.1	19.5	19.4	19.2	19.6	19.7	19.7	19.3	19.4
Off-budget	3.8	3.3	3.7	3.9	4.0	4.0	4.0	4.0	4.1	4.2	4.2	4.3	3.9	4.1
<b>Memorandum:</b>														
Gross Domestic Product														
(Billions of dollars)	14,513	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810	86,686	196,138

Source: Congressional Budget Office.

**Box 3-1.****Categories of Federal Spending**

On the basis of its treatment in the budget process, federal spending can be divided into three broad categories:

**Mandatory spending** consists primarily of benefit programs, such as Social Security, Medicare, and Medicaid. The Congress generally determines spending for those programs by setting rules for eligibility, benefit formulas, and other parameters rather than by appropriating specific amounts each year. In making baseline projections, the Congressional Budget Office (CBO) assumes that existing laws and policies for those programs will remain unchanged and that most programs that are scheduled to expire will be extended instead. Mandatory spending also includes offsetting receipts—fees and other charges that are recorded as negative budget authority and outlays. Offsetting receipts differ from revenues in that revenues are collected in the exercise of the government's sovereign powers (for example, in the form of income taxes), whereas offsetting receipts generally are collected from other government accounts or from members of the public for businesslike transactions (for example, as premiums for Medicare or as rental payments and royalties for the drilling of oil or gas on public lands).

**Discretionary spending** is controlled by annual appropriation acts; policymakers decide each year how much money to provide for given activities. Appropriations fund a broad array of government activities, including those involved with defense, law enforcement, and transportation, for example. They also fund the national park system, disaster relief, and foreign aid. Some fees and other charges that are triggered by appropriation action are classified as offsetting collections, which are credited against gross discretionary spending.

CBO's baseline depicts the path of discretionary spending as directed by the provisions of the Balanced Budget and Emergency Deficit Control Act of 1985.<sup>1</sup> That act stated that current appropriations should be assumed to grow with inflation in the

future. Although those provisions (contained in section 257 of the act) expired at the end of September 2006, CBO continues to follow their requirements in preparing its baseline for discretionary spending. Discretionary funding of government operations for fiscal year 2011 has been provided through early March by the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (Public Law 111-322), at a rate that would total \$1,255 billion in budget authority for the entire fiscal year—\$710 billion for defense and \$545 billion for nondefense activities.

In addition to spending from those appropriations, the baseline includes discretionary spending for high-way infrastructure, highway and motor carrier safety, public transit, and airport infrastructure programs that receive mandatory budget authority from authorizing legislation. Each year, however, the annual appropriation acts control spending for those programs by limiting how much of the budget authority the Department of Transportation can obligate. For that reason, such obligation limitations are treated as a measure of discretionary resources, and the resulting outlays are considered discretionary spending. Transportation obligation limitations for 2011 total \$54 billion at the annual rate provided by the continuing resolution.

**Net interest** includes interest paid on Treasury securities and other interest the government pays (for example, on late refunds issued by the Internal Revenue Service) minus interest that the government collects from various sources (such as from commercial banks that maintain Treasury tax and loan accounts). Net interest is determined by the size and composition of the government's debt, annual budget deficits or surpluses, and market interest rates.

1. The inflation rates used in CBO's baseline, as specified by the Deficit Control Act, are the employment cost index for wages and salaries (applied to expenditures related to federal personnel) and the gross domestic product price index (for other expenditures).

**Table 3-2.****Average Annual Rates of Growth in Outlays Since 2000 and as Projected in CBO's Baseline**

(Percent)

	Actual		Projected <sup>a</sup>		
	2000–2009	2010	2011	2012	2013–2021
Mandatory	8.8	-8.8	10.4	-3.3	5.6
Social Security	5.8	3.4	3.8	4.6	5.8
Medicare	9.1	4.3	9.8	-1.0	6.8
Medicaid	8.8	8.7	0.6	-3.6	9.3
Other <sup>b</sup>	13.0	-37.5	28.7	-16.5	0.3
Discretionary	8.0	9.0	1.9	-1.7	1.9
Defense	9.1	4.9	3.3	-0.3	2.3
Nondefense	6.9	13.7	0.5	-3.1	1.4
Net Interest	-2.0	5.4	14.1	17.5	13.0
<b>Total Outlays</b>	<b>7.5</b>	<b>-1.8</b>	<b>7.3</b>	<b>-1.4</b>	<b>5.1</b>
<b>Total Outlays Excluding Net Interest</b>	<b>8.5</b>	<b>-2.2</b>	<b>6.9</b>	<b>-2.7</b>	<b>4.3</b>
<b>Memorandum:</b>					
Consumer Price Index	2.6	1.7	1.6	1.3	2.1
Nominal Gross Domestic Product	4.4	2.9	3.6	4.4	4.7
Discretionary Budget Authority	9.9	-15.4	-0.7	1.4	2.4
Defense	9.2	2.9	-0.7	1.5	2.3
Nondefense	10.5	-31.3	-0.6	1.2	2.4

Source: Congressional Budget Office.

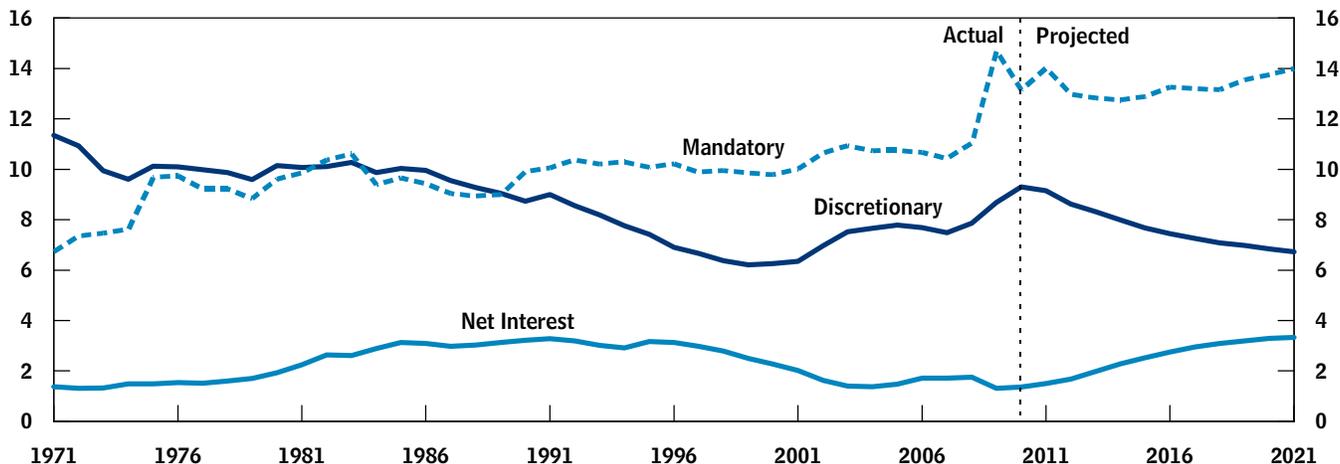
- a. When constructing its baseline, CBO uses the employment cost index for wages and salaries to inflate discretionary spending related to federal personnel and the gross domestic product price index to adjust other discretionary spending.
- b. Includes offsetting receipts (funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are recorded as offsets to outlays).

Although that pace is slower than the rate experienced over the past 10 years, it still exceeds the average annual growth of 4.7 percent in nominal GDP that CBO anticipates over the 2013–2021 period (see Table 3-2). During those years, mandatory spending is projected to rise at an average rate of 5.6 percent per year, and outlays for net interest grow even faster—by an average of 13.0 percent per year. Discretionary spending, however, is projected to rise at an average rate of 1.9 percent a year, given the assumption used to construct the baseline that funding for discretionary programs will rise only with inflation. In contrast, over the 2000–2009 period, discretionary spending rose by 8.0 percent per year, on average, nearly twice as fast as the rate of growth of the economy.

Compared with outlays over the past 40 years, the biggest difference in federal spending relative to GDP in the coming decade will be the amount of mandatory spending. In CBO's baseline projections, mandatory spending averages 13.2 percent of GDP over the coming 10 years, in contrast to the 9.9 percent of GDP it averaged from 1971 to 2010 (see Figure 3-1). That higher level of spending is mostly a result of outlays for Social Security, Medicare, Medicaid, and other health programs, which are projected to grow from 10.3 percent of GDP in 2012 to 12.7 percent in 2021. In contrast, outlays for all other mandatory programs are projected to decline as a share of GDP, falling from 2.7 percent in 2012 to 1.3 percent in 2021. On average during the next decade, net interest payments will not be too far from their historical average

**Figure 3-1.****Outlays, by Category**

(Percentage of gross domestic product)



Source: Congressional Budget Office.

share of GDP, but they will be rising rapidly as debt accumulates and interest rates go up; those payments will climb from 1.7 percent of GDP in 2012 to 3.3 percent in 2021. Under the baseline assumptions, projected discretionary spending decreases from 8.6 percent of GDP in 2012 to 6.7 percent in 2021.

In developing its baseline projections, CBO follows the rules established in the Balanced Budget and Emergency Deficit Control Act of 1985 (although that act has now expired). Therefore, when projecting spending for mandatory programs, CBO generally assumes that existing laws will remain unchanged and that future outlays will depend on the evolution of caseloads, benefit costs, and other factors. When projecting spending for discretionary programs, CBO assumes that the appropriations provided through March 4 under the continuing resolution for 2011 will be extended for the full year; it also assumes that funding (that is, the amounts appropriated) in future years will equal this year's assumed annual funding adjusted for inflation.<sup>3</sup>

3. The inflation rates used to produce CBO's baseline projections, as specified by the Deficit Control Act, are the employment cost index for wages and salaries (applied to expenditures related to federal personnel) and the gross domestic product price index (for other expenditures).

**Mandatory Spending**

Mandatory—or direct—spending programs account for more than half of federal outlays. The category includes spending for entitlement programs and certain other payments to people, businesses, nonprofit institutions, and state and local governments. Mandatory spending is generally governed by statutory criteria and is not normally constrained by the annual appropriation process. Also included in mandatory spending are offsetting receipts, which act as a credit against gross spending. Such receipts include certain types of payments that federal agencies receive from the public and other government agencies.

In 2010, mandatory outlays dropped by about 9 percent, falling to \$1.9 trillion from \$2.1 trillion in 2009. Relative to the size of the economy, mandatory spending peaked in 2009 at 14.8 percent of GDP and dropped last year to 13.2 percent of GDP. Much of the decline in spending in 2010 was attributable to unusually large negative outlays recorded for the TARP and deposit insurance and to a drop in payments to Fannie Mae and Freddie Mac (two institutions that facilitate the flow of funding for home loans nationwide). All other mandatory spending taken together grew rapidly last year, at a rate of about 10 percent.

If no laws are enacted that affect mandatory programs, CBO estimates that outlays for such programs will rise back to \$2.1 trillion in 2011, equal to 14.0 percent of

**Table 3-3.****CBO's Baseline Projections of Mandatory Outlays**

(Billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Social Security	701	727	761	799	842	889	940	997	1,059	1,126	1,196	1,267	4,231	9,876
Health Programs														
Medicare <sup>a</sup>	520	572	566	610	645	679	738	771	806	885	949	1,021	3,238	7,670
Medicaid	273	274	264	278	329	371	416	447	474	508	544	587	1,659	4,219
Other														
Health insurance subsidies, exchanges, and related spending	*	*	*	1	15	33	58	72	79	85	88	94	107	524
MERHCF	8	9	9	10	11	11	12	13	14	15	16	17	53	127
Children's Health Insurance Program	8	8	9	9	10	10	10	8	6	6	6	6	47	78
Other	1	7	9	8	18	24	22	25	28	32	34	38	80	237
Subtotal	17	24	27	27	52	78	101	118	126	137	144	155	286	966
Income Security														
SNAP	70	77	80	80	71	69	68	67	65	64	64	63	368	691
Unemployment compensation	159	129	87	64	61	58	53	52	54	56	58	60	324	604
Supplemental Security Income	47	53	46	52	53	54	60	57	53	60	62	69	265	566
Earned income and child tax credits	77	77	77	77	46	46	45	45	46	46	46	46	290	520
Family support <sup>b</sup>	28	27	25	25	25	25	25	25	25	25	25	25	125	250
Child nutrition	17	18	19	20	21	22	23	24	26	27	28	29	107	241
Foster care	7	7	7	7	8	8	8	8	9	9	9	10	37	82
Making Work Pay and other tax credits <sup>c</sup>	32	21	2	2	*	*	*	*	*	*	*	*	5	5
Subtotal	438	409	343	327	285	282	284	279	278	287	292	302	1,521	2,958
Federal Civilian and Military Retirement														
Civilian <sup>d</sup>	82	84	86	88	91	94	97	100	104	107	111	114	456	991
Military	51	55	48	53	54	55	61	58	55	61	63	65	271	573
Other	7	8	7	8	9	9	10	10	11	11	12	13	43	101
Subtotal	139	146	141	149	154	158	168	168	169	180	185	192	770	1,665
Veterans <sup>e</sup>														
Income security	49	67	53	58	59	61	67	63	60	66	68	69	297	623
Other	9	10	11	12	13	13	14	14	15	16	17	18	63	143
Subtotal	58	78	64	70	72	74	81	78	75	82	84	87	360	765
Other Programs														
TARP	-110	-25	4	2	1	1	1	*	*	*	*	*	9	10
Fannie Mae and Freddie Mac <sup>f</sup>	40	11	8	6	4	4	4	4	4	5	5	5	25	48
Deposit insurance	-32	6	8	3	-12	-12	-14	-17	-19	-10	-11	-12	-26	-95
Higher education	-13	-3	-7	-10	-7	-3	2	5	6	6	6	6	-25	4
Agriculture	15	16	13	17	16	15	15	15	15	15	15	16	76	153
Other	47	61	55	50	51	50	51	47	47	46	46	45	257	489
Subtotal	-52	68	82	68	54	55	58	55	53	63	62	60	316	608

Continued

Table 3-3.

Continued

## CBO's Baseline Projections of Mandatory Outlays

(Billions of dollars)

	Actual,											Total		
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Offsetting Receipts														
Medicare <sup>a</sup>	-74	-80	-89	-92	-96	-101	-106	-118	-128	-139	-151	-167	-483	-1,186
Federal share of federal employees' retirement	-61	-62	-64	-66	-68	-70	-73	-76	-80	-83	-87	-90	-340	-755
Other	-49	-48	-58	-64	-66	-69	-70	-74	-77	-80	-80	-81	-327	-718
Subtotal	-184	-191	-211	-222	-230	-240	-249	-267	-285	-302	-317	-338	-1,151	-2,659
<b>Total Mandatory Spending</b>	<b>1,910</b>	<b>2,108</b>	<b>2,038</b>	<b>2,106</b>	<b>2,203</b>	<b>2,346</b>	<b>2,538</b>	<b>2,647</b>	<b>2,757</b>	<b>2,964</b>	<b>3,138</b>	<b>3,333</b>	<b>11,230</b>	<b>26,070</b>
<b>Memorandum:</b>														
Mandatory Spending Excluding														
Offsetting Receipts	2,094	2,299	2,249	2,328	2,432	2,585	2,787	2,914	3,041	3,266	3,455	3,671	12,381	28,729
Medicare Spending Net of Offsetting Receipts	446	492	477	517	549	578	633	653	679	746	797	855	2,755	6,485

Source: Congressional Budget Office.

Notes: Spending for the benefit programs shown above generally excludes administrative costs, which are discretionary.

MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund (including TRICARE for Life); SNAP = Supplemental Nutrition Assistance Program; TARP = Troubled Asset Relief Program.

\* = between zero and \$500 million.

- a. Excludes offsetting receipts (funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are recorded as offsets to outlays).
- b. Includes Temporary Assistance for Needy Families and various programs that involve payments to states for child support enforcement and family support, child care entitlements, and research to benefit children.
- c. This category also includes outlays for the first-time homebuyer credit, the American Opportunity Credit, and other tax credits.
- d. Includes Civil Service, Foreign Service, Coast Guard, and other, smaller retirement programs as well as annuitants' health benefits.
- e. Income security includes veterans' compensation, pensions, and life insurance programs. Other benefits are primarily education subsidies.
- f. The amount recorded for 2010 reflects cash transfers from the Treasury to Fannie Mae and Freddie Mac. The amounts shown for 2011 through 2021 reflect CBO's estimate of the subsidy cost of new loans and guarantees made by those two entities in each year, adjusted for market risk.
- g. Includes Medicare premiums and amounts paid by states from savings on Medicaid prescription drug costs.

GDP.<sup>4</sup> CBO projects that, under baseline assumptions, mandatory spending will remain near \$2.1 trillion a year through 2013, after which it will steadily increase, reach-

ing \$3.3 trillion in 2021 (see Table 3-3). From 2012 to 2016, such spending will be close to 13.0 percent of GDP, but it will increase relative to the size of the economy later in the projection period, averaging about 13.5 percent of GDP between 2017 and 2021. By comparison, mandatory spending has averaged 11.2 percent of GDP during the past 10 years and 9.9 percent during the past 40 years.

4. About 14 percent (or \$28 billion) of the increase in mandatory spending in 2011 stems from a shift in the timing of some payments because the first day of fiscal year 2012, October 1, 2011, falls on a weekend.

CBO estimates that Social Security, Medicare, Medicaid, and other health programs will account for nearly 70 percent of mandatory spending (excluding offsetting receipts) in 2011. In the absence of any changes in law, outlays for those programs will exceed 80 percent of mandatory spending by 2021. Spending for those programs will equal 10.6 percent of GDP in 2011 but will grow to 12.7 percent by 2021, in large part because federal outlays related to health care are projected to increase rapidly.

Programs that are designed to provide income security—such as unemployment compensation, the Supplemental Nutrition Assistance Program (SNAP), and certain refundable tax credits—will account for nearly 18 percent of mandatory spending (excluding offsetting receipts) in 2011.<sup>5</sup> By 2021, though, outlays for those programs will make up only about 8 percent of mandatory spending, both because the expected economic expansion will allow spending for many of those programs to recede to more typical levels and because scheduled changes to tax provisions will reduce the refundability of certain tax credits. Under current law, spending for income-security programs will equal 2.7 percent of GDP in 2011 but will decline to 1.3 percent of GDP by 2021, CBO projects.

The remaining portion of mandatory spending includes retirement benefits for civilian and military federal employees, benefits for veterans, activities of the TARP, subsidies for Fannie Mae and Freddie Mac, deposit insurance, student loans, and support for agriculture. Under current law, spending for those programs will equal 1.9 percent of GDP in 2011 but will fall to 1.4 percent of GDP by 2021, in CBO's estimation.

### Social Security

Social Security, which is the largest federal spending program, provides cash benefits to the elderly, people with disabilities, and their dependents. Social Security comprises two main parts: Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI). Social Security outlays rose by 3.4 percent in 2010, primarily because both OASI and DI experienced higher-than-average increases in their caseloads: Nearly 53 million people received Social Security benefits in 2010, up from 51 million the previous year. Because overall consumer prices (as

measured by the consumer price index) declined in 2009, Social Security beneficiaries did not receive a cost-of-living adjustment (COLA) last year. Low inflation resulted in no COLA again in January 2011.

CBO estimates that, under current law, outlays for Social Security will reach \$727 billion in 2011, or 4.8 percent of GDP. Over the next decade, spending for Social Security benefits will climb steadily as the nation's elderly population grows and as average benefits rise. By 2021, CBO estimates, Social Security outlays will total \$1.3 trillion, or about 5.3 percent of GDP. In that year, more than 71 million people will collect Social Security benefits.

**Old-Age and Survivors Insurance.** OASI, the larger of Social Security's two components, pays full benefits to workers who start collecting those benefits at age 66 or 67, depending on the year the worker was born; workers can choose to start collecting reduced benefits as early as age 62. The program also makes payments to eligible spouses and children and to some survivors (primarily elderly widows and young children) of deceased workers. OASI benefits totaled \$573 billion in 2010, accounting for more than 80 percent of Social Security's outlays.

About 43 million people received OASI benefits in 2010. Over the 2011–2021 period, as more baby boomers become eligible to receive benefits under the program, the number of people collecting those benefits will increase by an average of about 3 percent per year, CBO estimates, reaching 59 million by 2021.

Average benefits rise over time, both because beneficiaries generally receive annual cost-of-living adjustments and because initial benefits are based on people's earnings, which tend to increase over time. OASI beneficiaries did not receive a COLA in January 2010 because the consumer price index declined during the previous year.<sup>6</sup> (Beneficiaries of Social Security and most other programs that provide COLAs are protected from a drop in benefit

5. Tax credits reduce a taxpayer's overall tax liability; if a refundable credit exceeds that liability, the excess may be refunded to the taxpayer, in which case that payment is recorded as an outlay in the budget.

6. Social Security benefits are indexed to inflation as measured by the consumer price index for urban wage earners and clerical workers (the CPI-W). The Social Security Administration generally adjusts benefits paid in January of each year on the basis of the annual change in the CPI-W through the third quarter of the previous calendar year. If the resulting adjustment is negative, no cost-of-living adjustment is made. The next cost-of-living adjustment is made when the CPI-W for the third quarter of a calendar year exceeds the CPI-W in the third quarter of the last year for which an adjustment was made.

payments when prices fall. Thus, despite the decline in the consumer price index, individuals' benefits remained at the previous year's amounts.) Even though there was no COLA again in January 2011, average benefits for OASI will increase slightly this year because initial benefits for new beneficiaries, which are based on retirees' lifetime wages, are expected to continue to rise.

CBO anticipates a COLA of 1.1 percent in 2012, 1.2 percent in 2013, and an average of 2.1 percent annually from 2014 through 2021. By CBO's estimates, the average benefit will rise by 3 percent per year, on average, over the 2011–2021 period. The increasing average benefit, in combination with the growing number of beneficiaries, is projected to boost OASI outlays by an average of about 6 percent per year over that period.

**Disability Insurance.** Social Security's disability benefits are paid to workers who suffer debilitating health conditions before they are old enough to enroll in OASI. (Payments also are made to the eligible spouses and children of those recipients.) In 2010, the federal government paid \$123 billion in benefits under DI.

The number of people receiving DI benefits jumped by almost 5 percent in 2010, to nearly 10 million. Higher-than-average increases in enrollment are expected to persist through 2012, largely because a high unemployment rate means that many of the disabled will continue to face meager job prospects. However, after 2013, the annual rate of growth in enrollment is projected to average 1.2 percent, as a strengthening economy leads fewer people to seek disability benefits and as a greater portion of the population qualifies for benefits under OASI. Like OASI beneficiaries, those receiving benefits under DI did not receive a COLA this year. Including COLAs that CBO projects will be paid in future years, average DI benefits under current law will grow by about 3 percent per year and the program's annual outlays will rise by an average of about 4 percent annually from 2011 through 2021.

### Medicare, Medicaid, and Other Health Programs

At \$810 billion, gross outlays for Medicare, Medicaid, and other mandatory federal programs related to health care accounted for just under 40 percent of mandatory spending (not including offsetting receipts) in 2010.<sup>7</sup> CBO estimates that outlays for those programs will reach \$870 billion in 2011, or 5.8 percent of GDP. In CBO's baseline projections, spending for health programs more

than doubles between 2011 and 2021, rising by an average of about 7 percent per year and reaching \$1.8 trillion in 2021. That spending is projected to represent 7.4 percent of GDP in 2021—a jump of 1.6 percentage points from its share in 2011. Of that growth, higher spending for Medicare accounts for about 30 percent, higher spending for Medicaid accounts for roughly 40 percent, and the remainder stems primarily from the new subsidies to be provided through health insurance exchanges beginning in 2014.

**Medicare.** The Medicare program provides subsidized medical insurance for the elderly and for some people with disabilities. Medicare has three parts: Part A (Hospital Insurance), Part B (Medical Insurance, which covers doctors' services, outpatient care, home health services, and other medical services), and Part D (the program for outpatient prescription drugs).<sup>8</sup> People generally become eligible for Medicare at age 65 or two years after they qualify for Social Security disability benefits. In 2010, Medicare had about 47 million beneficiaries; that number is expected to climb by about 3 percent per year over the next decade, reaching 64 million by 2021.

Gross spending for Medicare will total \$572 billion in 2011, CBO estimates, a jump of almost 10 percent over the amount recorded last year. Part of that increase results from a shift in certain payments from 2012 into 2011 because the first scheduled payment date in 2012 falls on a weekend. In the absence of that timing shift, gross spending for Medicare would rise by an estimated 7 percent in 2011. (The figure for gross spending excludes receipts from premiums and some payments from states, which are discussed in the section of this chapter on offsetting receipts).

Under current law, Medicare spending will be constrained starting in January 2012 by the "sustainable growth rate" mechanism, or SGR, which controls the fees paid for physicians' services. If the SGR is applied as it is

7. *Gross outlays* are the total mandatory outlays for the programs. That figure does not include the effect of offsetting receipts, such as those for Medicare premiums, which are treated as negative outlays for budgetary purposes and are discussed separately later in this chapter. *Net outlays* include such offsetting receipts.

8. Medicare Part C (known as Medicare Advantage) specifies the rules under which private health care plans can assume responsibility for, and be compensated for, providing benefits covered under Parts A, B, and D.

currently structured, those fees will be reduced by about 28 percent in January 2012 and by additional amounts in subsequent years, CBO projects. However, if future legislation overrides the scheduled reductions (as has happened in every year since 2003), spending on Medicare might be significantly greater than the amount that is projected in CBO's baseline. For example, if payment rates for physicians remained at their 2011 levels in nominal terms through 2021, net Medicare outlays over the next 10 years would be about \$250 billion (or about 3 percent) higher than in the baseline projections in this report. If those payments were increased over time, the impact on Medicare outlays would be even greater. (Other provisions of law enacted last year will hold annual increases in payment rates for other Medicare services to about 1 percentage point less than inflation—which would still represent nominal increases in payment rates of about 1 percent per year, given CBO's economic projections.)

Even with the constraining effect of the SGR, spending for Medicare under current law is anticipated to grow by 7 percent per year, on average, in the coming decade. During that period, federal spending per beneficiary for Parts A and B is projected to grow in nominal terms by close to 30 percent, while spending per beneficiary for Part D will roughly double. As a result, CBO projects that, under current law, Medicare spending will rise as a share of GDP from 3.6 percent in 2012 to 4.3 percent by 2021. By that time, gross Medicare outlays will exceed \$1.0 trillion. That figure for gross spending excludes receipts of premiums and some payments from states, which will total \$167 billion in 2021 under CBO's baseline projections.

**Medicaid.** Medicaid is a joint federal and state program that funds medical care for certain poor, elderly, and disabled people. The federal government shares costs with states for approved services; that share varies from state to state but has averaged about 57 percent until recently. Provisions in ARRA and in subsequent legislation temporarily increased the federal portion of costs to about 68 percent, on average, in 2010 and to 64 percent, on average, in 2011. (The average federal share will drop back to 57 percent in July 2011 and will remain at that level in 2012 and 2013, CBO estimates.) Federal outlays for Medicaid totaled \$273 billion in 2010—up by nearly 9 percent from the previous year's amount, chiefly because of those temporarily higher matching rates and greater enrollment caused by high unemployment.

CBO expects that Medicaid outlays will barely increase in 2011 and will drop by nearly 4 percent in 2012, mostly because the enhanced matching rates will no longer be in place and the improving economy will lead to lower growth in enrollment. Beyond 2012, spending for Medicaid will grow at an average annual rate of more than 9 percent, CBO projects. By 2021, under current law, federal outlays for Medicaid are expected to total \$587 billion, or about 2.5 percent of GDP, compared with 1.9 percent in 2010.

That growth is attributable to both a substantial jump in the number of beneficiaries and an increase in the federal share of spending for certain groups of new enrollees. Nearly 68 million people were enrolled in Medicaid at some point in 2010. Enrollment is expected to grow slowly in the short term (as the economy improves) but to rise more rapidly beginning in 2014 as more people become eligible for Medicaid under provisions of the Patient Protection and Affordable Care Act (PPACA, P.L. 111-148) as amended by the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152). By 2021, more than 97 million people will be enrolled in Medicaid at some point in the year, CBO estimates. For many of those new enrollees, the federal share of their costs will be significantly higher than the share for individuals who were eligible under prior law.<sup>9</sup>

**Other Health Programs.** In addition to Medicare and Medicaid, the federal government operates other programs through which it subsidizes the provision of health care for certain groups of people. That assistance has been available primarily to people with relatively low income, but also to federal civilian and military employees and retirees. Provisions in PPACA, as amended by the 2010 reconciliation act, will significantly increase the scope and scale of such benefits in the coming decade. In CBO's baseline projections, federal spending for mandatory health programs other than Medicare and Medicaid rises from \$24 billion this year to \$155 billion in 2021. Some portion of that spending will be offset by additional receipts and revenues, which are reflected elsewhere in the budget.

PPACA, as amended, establishes new exchanges for the purchase of health insurance and authorizes government

9. PPACA, as amended, provides enhanced federal matching rates for certain populations made eligible under the act, leading to an average federal share of spending for Medicaid ranging between 60 percent and 62 percent in 2014 and later years.

subsidies for such purchases for individuals and families who meet income and other eligibility criteria.<sup>10</sup> The subsidies for health insurance premiums are structured as refundable tax credits; the portions of such credits that exceed taxpayers' liabilities are classified as outlays, while the portions that reduce tax payments appear in the budget as reductions in revenues. CBO estimates that about 7 million people will receive exchange subsidies in 2014 and roughly 18 million will receive them by 2021.<sup>11</sup> Outlays for providing those subsidies, for operating the exchanges, and for running related programs will swell to \$94 billion by 2021, according to CBO's estimates.

The Department of Defense's Medicare-Eligible Retiree Health Care Fund (MERHCF), which includes TRI-CARE for Life, provides health care benefits to retirees of the uniformed services (and to their dependents and surviving spouses) who are eligible for Medicare. Outlays for those benefits totaled \$8 billion in 2010. Over the coming decade, spending from the MERHCF is projected to rise at about the same rate as spending for many other federal health care programs—by an average of roughly 7 percent each year—and to reach \$17 billion in 2021.

The Children's Health Insurance Program (CHIP) provides health insurance coverage to children in families with income that, although modest, is too high to qualify for Medicaid. The program is jointly financed by the federal government and the states and is administered by the states within broad federal guidelines. Total federal spending for CHIP was approximately \$8 billion in 2010, and it will be roughly the same amount in 2011, CBO estimates. Annual CHIP spending will grow by about 5 percent each year through 2015 (the last year in which that program is authorized), when total spending is estimated to be about \$10 billion. Under the rules governing baseline projections, the program's funding after 2015 is assumed to decline to about \$6 billion per year, and projected outlays fall to that level a few years later.<sup>12</sup> Nearly 9.2 million people will be enrolled in CHIP at

some point in 2011, CBO estimates. Because funding for the program is assumed to drop later in the decade, projected CHIP enrollment in 2021 under the baseline is much smaller.

Spending on other mandatory health programs includes health benefits for federal employees and Postal Service retirees, program management and funding for state grants and demonstrations, and new programs established under PPACA, as amended. Such spending is expected to rise from \$7 billion in 2011 to \$38 billion in 2021. Most of the increase in spending for that category is a result of those new programs, which include the following:

- *Risk Adjustment and Reinsurance.* Outlays for payments to health insurance plans whose pool of enrollees is expected to have above-average costs (known as risk adjustment) and to plans that enroll individuals who end up having high costs (known as reinsurance) are estimated by CBO to total \$155 billion over the 2012–2021 period. Those amounts are expected to be offset by revenues of an equal magnitude collected from health insurance plans; those collections are reflected on the revenue side of the budget.
- *CLASS.* Gross spending for Community Living Assistance Services and Supports (CLASS)—a new voluntary federal program for long-term care insurance—is estimated to total \$28 billion over the 2012–2021 period. Because individuals are not eligible for benefits until they have been enrolled for at least 5 years, premium collections are expected to greatly exceed benefit payments over the next 10 years. Those premium payments, totaling a projected \$112 billion during that period, are classified as offsetting receipts, a credit against direct spending.

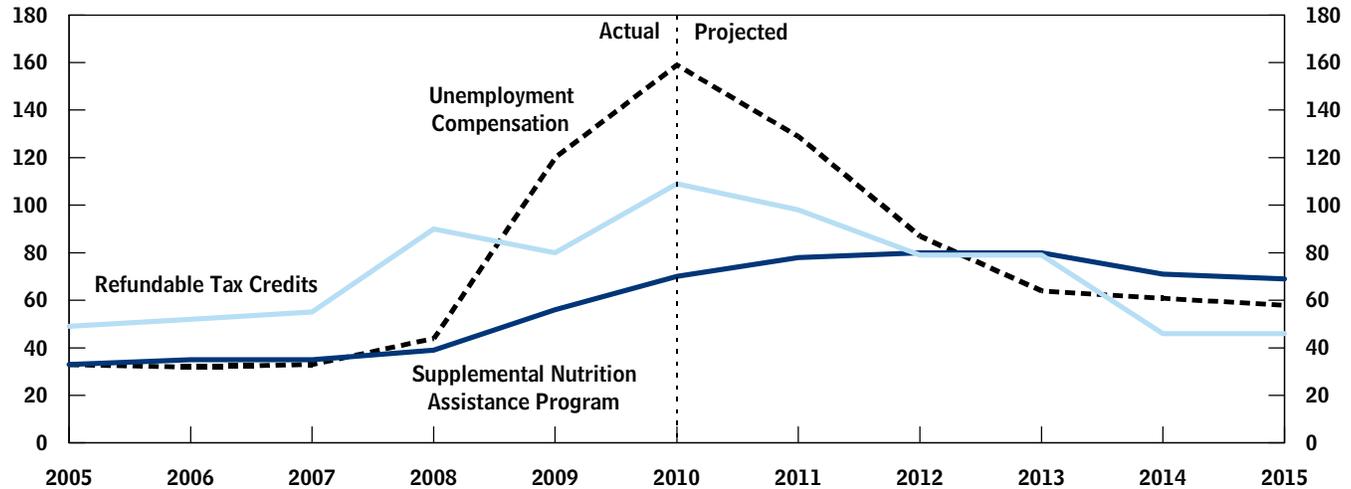
10. Health insurance exchanges are clearinghouses through which consumers can compare and purchase health insurance plans available in their area of residence and through which federal tax credits for such purchases will be made available.

11. Other individuals and certain employers can purchase health insurance through the exchanges; however, they will not be eligible to receive premium subsidies. CBO estimates that there will be about 10 million people in exchange plans in 2021 who will not qualify for subsidized health insurance premiums.

12. For mandatory programs, baseline rules established by the Deficit Control Act call for extrapolating an annualized amount of program funding at the end of the authorization period for the remainder of the baseline projection period. CHIP funding in 2015 consists of two semiannual allotments of \$2.85 billion—amounts that are lower than the allotments in the four previous years. Under current law, the first semiannual allotment in 2015 will be supplemented by an additional \$15.4 billion in one-time funding for the program. CBO's baseline for subsequent years is extrapolated from the \$2.85 billion provided for the second half of the year—an annualized amount of \$5.7 billion.

**Figure 3-2.****Outlays for Selected Income-Security Programs**

(Billions of dollars)



Source: Congressional Budget Office.

Note: Refundable tax credits reduce a taxpayer's overall tax liability; if the credit exceeds that liability, the excess may be refunded to the taxpayer, in which case it is recorded as an outlay in the budget. In this figure, refundable tax credits include the earned income tax credit, the child tax credit, the Making Work Pay tax credit, the first-time homebuyer tax credit, and the American Opportunity Credit.

■ **Other Programs.** Spending on grants for prevention and public health activities, school-based health centers, and the Center for Medicare and Medicaid Innovation is estimated to total about \$36 billion between 2012 and 2021. Spending for the Temporary Federal High Risk Pool Program and the Early Retiree Reinsurance Program established by PPACA is estimated to total just over \$3 billion in 2011. An additional \$4 billion is expected to be spent on those two programs before 2015, after which funding will no longer be available.

**Income-Security Programs**

The federal government makes various payments to people and government entities to assist the disabled, the poor, the unemployed, needy families with children, and children who have been abused and neglected. Federal spending for SNAP, unemployment compensation, Supplemental Security Income (SSI), the refundable portions of the earned income tax credit (EITC) and child tax credit, family support, foster care, and other services totaled \$438 billion in 2010, or 3.0 percent of GDP. Spending for those programs in 2010 was 25 percent higher than it was in 2009, which in turn was up by 35 percent from such spending in 2008 (when it totaled \$260 billion). The increase occurred partly because

outlays for many of those programs tend to rise automatically when the economy falters (and ebb later as the economy recovers) and partly because policymakers enacted temporary measures to augment payments to needy populations (see Figure 3-2).

Under current law, spending on income-security programs is expected to decline by more than 6 percent in 2011 and by 16 percent in 2012, reflecting the anticipated improvement in the economy and the expiration of certain provisions of law. Such spending is projected to continue to decline for several years thereafter and to remain below the 2012 level through 2021. By that year, outlays for those programs are anticipated to be 1.3 percent of GDP, less than half of the share such spending represented in 2010.

**Unemployment Compensation.** Outlays for unemployment compensation climbed to nearly \$160 billion in 2010, more than four times the amount they were in 2007, before the start of the recession. A high unemployment rate and legislation that provided enhanced benefits for jobless individuals led to that high level. Outlays will drop back in 2011, CBO estimates, to \$129 billion. Although the unemployment rate is projected to average 9.4 percent this calendar year, and temporarily extended

benefits for the long-term unemployed (people without a job for more than 26 consecutive weeks) will be in place all year under current law, CBO expects that the number of people receiving first-time payments of regular unemployment benefits will fall and that the average benefits received by unemployed individuals will be lower in 2011 than they were in 2010. First-time payments will probably decline as the economic recovery continues because new entrants into the labor force will make up a larger share of the unemployed population and the share represented by people who lose their job—and who are more likely to qualify for unemployment compensation—will decline. In subsequent years, outlays for unemployment compensation will continue to drop as the unemployment rate decreases and the temporary measures benefiting long-term unemployed workers expire. By 2021, CBO projects, unemployment compensation will amount to \$60 billion, or 0.3 percent of GDP, roughly the same share of the economy that it was in 2007.

Since late 2008, spending for unemployment compensation has been affected by changes in law that temporarily provide additional benefits to people who have been out of work for more than 26 weeks. Those provisions allow individuals who exhaust their regular benefits to collect emergency unemployment compensation (EUC) for as many as 53 weeks. Although payments for EUC will start to phase out in January 2012 under current law, that additional compensation will amount to \$54 billion in 2011 and \$20 billion in 2012, according to CBO's estimates.

**Supplemental Nutrition Assistance Program.** Outlays for SNAP surged to \$70 billion in 2010, double the amount they were in 2007, as enrollment (measured by the average monthly caseload) skyrocketed to 40.3 million. CBO estimates that the program's spending will climb by another 10 percent this year, to \$77 billion, largely because of a further projected increase in participation. Participation in SNAP continued to swell after past recessions even as the unemployment rate began to wane, so CBO expects that the number of people collecting SNAP benefits will continue to rise in the short term, peaking at 46.0 million in 2012. Eventually, as the economy continues to improve, SNAP enrollment will recede to 30.5 million by 2021, CBO projects.

According to CBO's estimates, the average benefit provided under SNAP will not change in 2011. The provi-

sions in ARRA that raised the maximum monthly SNAP benefit for a household of four from \$588 to \$668 in 2009 also stated that the benefit will remain at that amount until the routine inflation adjustment that otherwise would have been applied to the benefit amount in 2009 exceeds the increase provided in ARRA. Subsequent legislation eliminated the ARRA-stipulated increase effective after October 31, 2013. CBO projects that the maximum benefit for SNAP will drop to \$617 for the remainder of fiscal year 2014 and then be adjusted annually, rising to an estimated \$744 by 2021. In that year, outlays for SNAP will total \$63 billion, CBO projects—\$14 billion lower than spending for the program this year.

**Supplemental Security Income.** SSI provides cash benefits to people with low income who are elderly or disabled. Outlays for SSI rose by more than 5 percent in 2010, chiefly because the weak economy contributed to rising caseloads. According to CBO's estimates, payments for SSI—which totaled \$47 billion in 2010—will jump by more than 12 percent in 2011, although most of that growth is attributable to a shift in the timing of those payments. Because the first day of fiscal year 2012 falls on a weekend, 13 SSI benefit payments will be made in 2011 instead of the usual 12; without the timing shift, outlays for SSI would grow by about 4 percent this year. After 2012, spending for SSI will continue to rise at an average annual rate of about 4 percent and will total \$69 billion in 2021, CBO projects.

**Earned Income and Child Tax Credits.** The EITC is a fully refundable credit available primarily to people with earnings and income that fall below established maximums. The child tax credit is a partially refundable credit available to qualifying families with dependent children. Either credit reduces a filer's overall tax liability; if the credit exceeds the liability, the excess may be refunded depending on the filer's earnings. The refundable portions (which are categorized as outlays) totaled \$77 billion in 2010 and are projected to remain at that amount in each year through 2013.

Under current law, outlays for the child tax credit will be significantly lower in 2014 and beyond, for two reasons. First, the maximum amount of the credit will drop from \$1,000 to \$500. Second, the expiration of various tax cuts at the end of 2012 will boost many people's tax liabilities; consequently, more of the impact of the credit will be reflected as a reduction in revenues rather than as

an increase in outlays. As a result, under current law, outlays for those two credits will fall to \$46 billion in 2021, CBO projects.

**Family Support.** Spending for family support programs—grants to states that help fund welfare programs, child support enforcement, and child care entitlements—is expected to edge down in the next few years, declining from \$28 billion in 2010 to \$25 billion in 2012 and later years. Two factors contribute to that pattern. First, special funding added to the Temporary Assistance for Needy Families (TANF) program by ARRA expired at the end of fiscal year 2010 (although outlays from that authority will continue for the next few years). Second, funding for the regular TANF program—the largest component of the family support programs—is capped at roughly \$17 billion annually (although some additional funding becomes available if states' unemployment rates or SNAP caseloads exceed certain thresholds).

**Child Nutrition and Foster Care.** CBO projects that spending for child nutrition—which provides cash and commodities for meals and snacks in schools, day care settings, and summer programs—will rise by nearly 6 percent in 2011, to \$18 billion. That rapid growth in spending is spurred by rising participation in the free-lunch program. CBO anticipates that provisions in the Healthy, Hunger-Free Kids Act of 2010 (P.L. 111-296) will lead to further increases in program participation and higher reimbursement rates for meals beginning in 2013. As a result, spending for child nutrition will grow to \$29 billion in 2021, CBO projects.

Federal grants to states for foster care and adoption assistance are expected to remain near last year's level—at about \$7 billion—in 2011. Such spending is boosted by the higher matching rates that are temporarily in place for Medicaid, which will remain in effect through June 2011 under current law. Although the expiration of those higher matching rates will reduce spending on foster care and adoption assistance in the near term, higher caseloads, particularly for subsidized guardianship, will gradually increase such spending. On balance, CBO estimates that such spending will increase over the coming decade, reaching \$10 billion in 2021.

**Making Work Pay and Other Tax Credits.** ARRA created a number of refundable tax credits. The largest of those was the Making Work Pay tax credit, which expired at the end of December 2010. That credit amounted to 6.2 percent

of an eligible individual's earned income for tax years 2009 and 2010, up to a maximum of \$400 for individuals (or \$800 for joint filers). The credit was fully refundable; the portion of the credit that exceeded a taxpayer's liability was categorized as outlays. Total outlays were about \$14 billion in 2010 and are expected to be similar in 2011, the last year in which that credit will affect outlays.

ARRA also significantly expanded the first-time home-buyer credit, providing a fully refundable credit of up to \$8,000. (That credit was subsequently extended to apply to home purchases through April 2010 and expanded further to make certain non-first-time buyers eligible for a credit of up to \$6,500.) Outlays for that credit were nearly \$9 billion in 2010 but are estimated to be less than half that amount in 2011, the last year in which that credit will affect outlays.

In addition, the law allows certain individuals (including those who owe no taxes) to claim a tax credit—the American Opportunity Credit—for college expenses. That credit, originally available only for tax years 2009 and 2010, was recently extended for an additional two years by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312). Outlays for that credit are estimated to be just under \$4 billion this year and \$2 billion in each of 2012 and 2013.

**Other Federal Retirement and Disability Programs** Benefits for federal civilian and military retirees and payments for veterans' pensions and disability benefits totaled \$197 billion in 2010, or about 1.4 percent of GDP. CBO projects that spending for those benefits will jump by more than 13 percent this year, primarily because of a sharp rise in veterans' benefits, and then will grow at an average rate of roughly 2.2 percent annually. By 2021, such spending will amount to \$279 billion, or 1.2 percent of GDP, according to CBO's baseline projections.

**Civilian and Military Retirement.** Retirement and survivors' benefits for federal civilian employees (along with benefits for several smaller retirement programs for employees of various government agencies and for retired railroad workers) amounted to \$88 billion in 2010. CBO projects that such outlays will grow by about 3 percent annually over the coming 10 years, reaching \$127 billion by 2021. Growth in federal retirement benefits is attrib-

utable primarily to COLAs for retirees and to rising federal salaries, which boost future benefits for people entering retirement. (As with Social Security beneficiaries, recipients of civilian and military retirement benefits did not receive COLAs in 2010 or 2011.)

One factor that restrains growth in retirement benefits is the gradual replacement of the Civil Service Retirement System (CSRS) with the Federal Employees Retirement System (FERS). FERS covers employees hired after 1983 and provides a smaller defined benefit than that provided by CSRS. FERS recipients, however, are eligible to receive Social Security benefits based on their federal employment (CSRS employees are not), and their contributions to the federal Thrift Savings Plan are matched in part by their employing agencies.

The federal government also provides retirement and disability benefits to personnel who retire from the uniformed services. Military annuities totaled \$51 billion in 2010 and will rise to \$55 billion this year; they are projected to grow over the next 10 years by an average of about 2 percent per year, reaching \$65 billion in 2021. Most of the growth in military retirement programs results from COLAs and rising levels of basic pay.

**Veterans' Benefits.** Mandatory spending for veterans—including disability compensation, pensions, burial benefits and life insurance, and readjustment benefits—has increased rapidly over the past few years. Such spending jumped by 17 percent in 2010, to \$58 billion, primarily as a result of the phasing-in of the Post 9/11 GI bill, which greatly expanded education benefits available to veterans, reservists, and active-duty service members. (Those figures do not include the significant amount of funding for veterans' health care, which is provided by discretionary appropriations and is discussed later in this chapter.) Outlays are anticipated to climb by another 33 percent in 2011, to \$78 billion. Some of that growth stems from a shift in the timing of benefit payments (13 payments will be made this year, rather than the usual 12), but much results from changes in regulations for veterans' disability compensation. The Department of Veterans Affairs now provides disability compensation for Vietnam veterans exposed to Agent Orange who have been diagnosed with certain conditions. CBO expects those changes will add \$11 billion to outlays this year in the form of retroactive and prospective payments. CBO projects a slower rate of growth between 2012 and

2021—averaging about 3.5 percent a year—yielding outlays of \$87 billion in 2021.

### Other Mandatory Spending

Spending for other mandatory programs fell sharply in 2010, primarily because of a reassessment of the costs of the TARP that resulted in significant negative outlays being recorded last year, lower payments to Fannie Mae and Freddie Mac, and higher receipts in the deposit insurance program. Last year, other mandatory spending equaled *negative* \$52 billion, compared with positive outlays of \$300 billion in 2009. Such spending is expected to be positive again in 2011, with outlays totaling \$68 billion. CBO projects that outlays for other mandatory spending will rise to \$82 billion in 2012 before leveling out at an annual average of just under \$60 billion during the rest of the coming decade.

**Troubled Asset Relief Program.** The TARP was created by the Emergency Economic Stabilization Act of 2008 (EESA) to enable the Secretary of the Treasury to purchase or insure troubled assets.<sup>13</sup> Authority to make new commitments under the program expired last year. The EESA specified that the budgetary impact of the TARP should be the present value of its anticipated net outlays, with that present value calculated using a discount rate that adjusts for market risk. Following standard procedures for the valuation of credit programs in the federal budget, the Administration's original estimate of net outlays for the TARP may be increased or decreased by a "credit reestimate" in subsequent years, based on updated valuations of the cash flows associated with the program.

In 2009, the Administration recorded an estimated cost of \$151 billion for the TARP. However, improvements in the financial markets and in the financial condition of some of the largest firms that received TARP funds led the Administration to adjust its estimate of the program's costs by reporting negative net outlays of \$110 billion in 2010. CBO expects a smaller adjustment this year, resulting in negative net outlays of \$25 billion in 2011. From 2012 to 2015, outlays for the TARP, mainly for mortgage programs, are projected to range between \$1 billion and \$4 billion a year. As CBO reported in November 2010, it currently estimates the total cost of the TARP to be \$25 billion.

13. See Congressional Budget Office, *Report on the Troubled Asset Relief Program—November 2010*.

**Fannie Mae and Freddie Mac.** As a result of mounting losses, the government placed Fannie Mae and Freddie Mac, two institutions that facilitate the flow of funding for home loans nationwide, into conservatorship in September 2008.<sup>14</sup> Because the Administration considers Fannie Mae and Freddie Mac to be nongovernmental entities for federal budgeting purposes, it records the Treasury's net cash infusions to the two entities as outlays in the budget. In 2010, such infusions totaled \$40 billion.

In contrast to the Administration's approach, CBO projects the budgetary impact of the two entities' operations as if they were being conducted by a federal agency, because of the degree of management and financial control that the government exercises over them.<sup>15</sup> Therefore, CBO estimates the net lifetime costs—that is, the subsidy costs—of new loans and guarantees to be issued by the entities and counts those costs as federal outlays in the year of issuance. CBO expects that such costs for new loans and guarantees to be provided in 2011 will be \$11 billion. (By comparison, CBO expects that net cash infusions to Fannie Mae and Freddie Mac will total \$17 billion in 2011.) As housing markets stabilize over the next several years, CBO anticipates that subsidy costs for new loans and guarantees will decline, ranging between \$4 billion and \$5 billion annually from 2014 to 2021.

**Deposit Insurance.** Net outlays for deposit insurance averaged about \$20 billion a year in 2008 and 2009 because of the cost of resolving failed banks and credit unions. In contrast, net outlays for deposit insurance were *negative* \$32 billion last year, reflecting required prepayments of insurance premiums and the repayment of loans made by the federal government in 2009 to support the corporate credit union system. Because last year financial institutions prepaid approximately \$35 billion in premiums that otherwise would have been paid over the period through June 2013, receipts during the next two and a half years will be lower by a corresponding amount. As a result, CBO estimates, net outlays for

deposit insurance will average \$6 billion annually over the 2011–2013 period. Beginning in 2014, premium payments will exceed amounts spent on failed institutions, CBO projects, and net outlays for deposit insurance will again be negative.

**Remaining Mandatory Programs.** Outlays for the remaining mandatory programs, including those for higher education and support for agriculture, will account for less than 3 percent of gross mandatory spending in the next 10 years. Outlays for those programs totaled \$49 billion in 2010 and are projected to reach \$67 billion in 2021 under current law. Such spending will be about 0.3 percent of GDP throughout the coming decade.

Outlays for mandatory programs for higher education were a negative \$13 billion (on a present-value basis) in 2010 primarily because of a temporary program under which the Department of Education bought federally guaranteed student loans from the private sector, thus converting them into direct government loans. Federally guaranteed student loans have higher costs (or lower savings) than comparable direct loans made by the government.<sup>16</sup> Thus, converting guaranteed loans to direct loans was estimated to yield budgetary savings in 2010. The government's net costs for student loans are estimated to be a negative \$3 billion in 2011. In subsequent years, CBO projects, rising interest rates will drive up the cost to the government of student loans and result in positive net outlays beginning in 2016. Over the 2012–2021 period, mandatory outlays for higher education will total \$4 billion, on net, CBO estimates.

Mandatory spending for agricultural support totaled \$15 billion in 2010 and is projected to average about that amount in each year between 2011 and 2021. That spending will dip in 2012, to about \$13 billion, largely because of changes in the timing of payments for crop insurance and commodity programs that were mandated in the 2008 farm bill. Starting in 2013, spending for the crop insurance program is expected to rise as a result of projected increases in crop prices and the value of insured crops. However, the higher spending for crop insurance will be offset by the scheduled termination of agriculture disaster assistance programs.

14. Conservatorship is the legal process by which an entity is appointed to establish control and oversight of a company to put it in a sound and solvent condition.

15. See Congressional Budget Office, *CBO's Budgetary Treatment of Fannie Mae and Freddie Mac* (January 2010); and *Fannie Mae, Freddie Mac, and the Federal Role in the Secondary Mortgage Market* (December 2010).

16. See Congressional Budget Office, *Costs and Policy Options for Federal Student Loan Programs* (March 2010).

Other mandatory spending includes telecommunications subsidies provided from the Universal Service Fund, certain programs in the Departments of Justice and Homeland Security, social services and rural investment initiatives, and outlays related to the Build America Bonds program. Such outlays totaled \$47 billion in 2010 and are estimated to be near that same amount—\$45 billion—in 2021.

### What Causes Growth in Mandatory Spending?

Gross mandatory spending (which excludes offsetting receipts) will total \$2.3 trillion in 2011, CBO estimates. By 2021, that spending will be \$3.7 trillion. Automatic across-the-board increases in benefits account for about one-quarter of that \$1.4 trillion increase. Other increases in benefits and rising caseloads, including new benefits to be provided through health insurance exchanges, account for three-quarters of the rise (see Table 3-4).

**COLAs and Other Automatic Adjustments.** Social Security and other federal retirement programs grant automatic COLAs. There was no adjustment in 2010 or 2011, however, because the consumer price index for urban wage earners and clerical workers (the measure of inflation to which most federal COLAs are tied) remained lower than it was in 2009. The 2009 COLA for most retirement programs was a 5.8 percent increase, based on the growth in prices between the third quarters of 2007 and 2008. Overall consumer prices fell after that, but provisions of law protect beneficiaries against negative COLAs; in years when the relevant price measure falls, benefits remain unchanged. The next COLA for retirement programs will occur once overall consumer prices move above their level in the third quarter of 2008, which CBO estimates will happen later this year. Future COLAs are expected to be 1.1 percent in 2012, 1.2 percent in 2013, and an average of 2.1 percent annually from 2014 through 2021.

Such automatic adjustments for inflation that are made to benefits for retirement and other programs (excluding Medicare) account for 18 percent of the growth in mandatory spending through 2021.<sup>17</sup>

Payment rates for most Medicare services (except for physicians' services) also are adjusted annually to reflect changes in the costs of goods and services used by providers. The health care legislation enacted in March 2010 will hold annual increases in payment rates for those services to about 1 percentage point less than the mea-

sured changes in the costs of goods and services would otherwise indicate.

Limits on fees paid for physicians' services partly offset the effect of other automatic annual increases on Medicare spending. Payments for physicians' services are updated each year according to the sustainable growth rate formula, which sets a cumulative spending target for payments to physicians and for services related to medical visits, such as laboratory tests. Left unaltered, the SGR formula would ultimately recoup spending in excess of the specified cumulative target by reducing or restraining payment rates for physicians' services. Under current law, the SGR formula will reduce payment rates for physicians' services by about 28 percent in January 2012 and by additional amounts in subsequent years. (Recent legislation extended current payment rates to avoid any reduction in payment rates for physicians through calendar year 2011, but the SGR formula was left in place for future years.) If there are no further changes in the formula, then cumulative Medicare spending for physicians' services as determined under the SGR will be nearly back in line with the formula's targets by 2021, but payment rates for physicians will be about two-thirds (in nominal terms) of what they were in 2011.

In combination, the scheduled SGR adjustments for payments to physicians and the automatic annual adjustments for other types of payments will decrease Medicare spending by \$7 billion in 2012 and increase it by \$115 billion by 2021. Those adjustments make up about 8 percent of projected nominal growth in mandatory spending over the next decade.<sup>18</sup>

**Other Changes in Benefits.** Other factors that contribute to rising benefits account for 45 percent of the increase in

17. The EITC and SNAP are indexed to other measures of inflation. Benefits under SNAP are adjusted annually according to increases in a market basket of food served at home. Under provisions of ARRA, however, the maximum monthly SNAP benefit for a household of four was set at \$668, about 14 percent higher than the maximum benefit at the time that the legislation was enacted. Under subsequent amendments to ARRA, the maximum benefit will remain at that higher amount through October 31, 2013, after which it will fall to the unadjusted amount of \$617 for the remainder of fiscal year 2014.

18. Amounts discussed for Medicare are for gross spending and do not include the offsetting effects of premium payments. Those payments are set to cover about one-quarter of the costs for Part B. Premiums also are paid under Part D.

**Table 3-4.****Sources of Cumulative Growth in Mandatory Outlays After 2011**

(Billions of dollars)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimated Outlays in 2011	2,299	2,299	2,299	2,299	2,299	2,299	2,299	2,299	2,299	2,299
Sources of Growth										
Cost-of-living and other automatic adjustments										
Social Security	6	15	27	41	58	77	98	121	144	168
Medicare	-7	-5	4	15	29	43	58	74	93	115
Other programs <sup>a</sup>	4	9	7	15	24	33	41	52	62	73
Subtotal	3	18	38	71	110	152	197	247	299	355
Other changes in benefits										
Social Security	7	15	24	33	45	60	76	95	117	139
Medicare	31	54	77	96	123	152	182	223	262	306
Medicaid	-15	-2	25	57	88	115	138	167	200	239
Other programs <sup>a</sup>	-53	-73	-101	-99	-96	-93	-90	-84	-79	-69
Subtotal	-31	-7	25	87	160	234	306	401	500	616
Changes in caseloads										
Social Security	21	42	64	87	110	133	157	182	207	233
Medicare	*	4	7	11	15	19	24	31	37	43
Medicaid	5	6	29	40	54	58	62	66	70	74
Other programs <sup>a</sup>	-2	-3	-7	-13	-21	-26	-28	-32	-34	-37
Subtotal	24	49	93	125	158	185	216	247	280	313
Health insurance subsidies, exchanges, and related spending										
	*	1	15	33	58	72	79	85	88	94
Shifts in payment dates <sup>b</sup>										
	-56	-28	-28	-28	0	-28	-56	-28	-28	-28
Other factors										
	9	-5	-10	-1	2	1	*	15	18	22
<b>Total Changes in Outlays</b>	<b>-50</b>	<b>29</b>	<b>133</b>	<b>286</b>	<b>488</b>	<b>615</b>	<b>742</b>	<b>967</b>	<b>1,156</b>	<b>1,372</b>
Projected Outlays	2,249	2,328	2,432	2,585	2,787	2,914	3,041	3,266	3,455	3,671

Source: Congressional Budget Office.

Note: Amounts do not include the effects of offsetting receipts; \* = between zero and \$500 million.

- a. This category includes unemployment compensation, earned income and child tax credits, the Making Work Pay tax credit, military and civilian retirement, veterans' benefits, child nutrition, the Supplemental Nutrition Assistance Program, Supplemental Security Income, and foster care.
- b. Represents differences attributable to the number of benefit checks that will be issued in a fiscal year. Benefit payments normally are made once a month, but in 2011 there will be 13 monthly payments. That factor will reduce spending for Medicare, Supplemental Security Income, and military retirement and veterans' compensation in 2012 and subsequent years relative to the amount in 2011. Those programs will make 11 monthly payments in 2012 and 2018, 13 in 2016, and 12 payments in other years.

mandatory spending through 2021. The vast majority of that increase is attributable to growth in spending for Medicare and Medicaid that is not attributable to statutory adjustments in payment rates or rising caseloads, such as increased use of costly medical technology. Medicaid spending will be diminished in 2012 and 2013 because the expiration of temporarily enhanced federal

matching rates later this year will reduce the federal share of the program's costs. Beginning in 2014, new federal matching rates on services provided to individuals made eligible for Medicaid under PPACA, as amended, will take effect. Those rates are significantly higher than the rates paid to states for other Medicaid services.

Benefits for other programs will also experience growth beyond automatic adjustments. Growth in wages, for example, affects Social Security payments, federal retirement benefits, and unemployment compensation. Rising wages also affect outlays for refundable tax credits by reducing eligibility and increasing the proportion of credits that will offset tax payments rather than be refunded.

Certain provisions of law will reduce mandatory spending in future years. Under current law, additional benefits for unemployment compensation, first enacted in 2008 (and subsequently expanded and extended) will phase out starting in January 2012. Expiring tax provisions will affect outlays for the EITC and the child tax credit by reducing the refundable portion of those credits in future years. In addition, the Making Work Pay tax credit enacted in ARRA, which will be responsible for \$14 billion in outlays this year, will have no effect on future outlays. All together, changes in benefits apart from those from Social Security, Medicare, and Medicaid will reduce mandatory spending by \$69 billion in 2021 compared with spending in 2011.

**Changes in Caseloads.** CBO projects that net increases in the number of people who will be eligible for and claim benefits under mandatory programs will add \$313 billion to mandatory spending by 2021, accounting for 23 percent of the growth in such spending. The three largest programs (Social Security, Medicare, and Medicaid) will be responsible for increases of \$350 billion over that time, CBO estimates. Other mandatory benefit programs will serve fewer people, on net, in 2021 than in 2011, pushing down mandatory spending by \$37 billion in 2021. In particular, SNAP, unemployment compensation, and CSRS will see fewer beneficiaries in 2021 than are expected in 2011.

**Health Insurance Subsidies, Exchanges, and Related Spending.** Recently enacted legislation provides health insurance subsidies beginning in 2014 for certain individuals and families. The legislation also provides funding before that date to establish insurance exchanges and implement certain other provisions related to health insurance coverage. Outlays for those programs will total less than \$1 billion in 2011 but will rise to \$94 billion by 2021, according to CBO's estimates, accounting for 7 percent of the growth in mandatory spending over the next decade.

**Changes in Payment Dates.** The timing of outlays for some mandatory programs depends on whether

October 1, the first day of the fiscal year, falls on a weekday or on a weekend. When it falls on a Saturday or a Sunday, some benefits will be paid at the end of September instead, increasing spending for the preceding fiscal year but decreasing outlays for the forthcoming year. Payments for SSI, the veterans' compensation and pension programs, military retirement, and some Medicare benefits can be affected by such calendar shifts, causing the programs to make 11, 12, or 13 monthly payments in a fiscal year. Because October 1, 2011, falls on a Saturday, there will be 13 monthly payments for those programs in fiscal year 2011 and 11 monthly payments in 2012. Compared with outlays in 2011, spending in most other years will be reduced because there will be 11 or 12 monthly payments in those years. (There also will be 13 monthly payments in 2016.)

**Other Factors.** Spending for other mandatory programs, including net outlays for the TARP, deposit insurance, and student loans, is projected to be higher in most years between 2012 and 2021 than in 2011. In 2021, such spending is projected to be \$22 billion higher than in 2011, primarily because outlays for the TARP, which are expected to be negative in 2011, will have hardly any budgetary effect in 2021. Likewise, net outlays for student loans are estimated to be negative this year by \$3 billion, but as interest rates rise over the coming years, such costs will rise to \$6 billion in 2021, according to CBO's projections. The effect of those swings will be partially offset by reduced outlays for other programs; in particular, net outlays for deposit insurance are projected to be \$18 billion lower in 2021 than in 2011.

### Offsetting Receipts

Offsetting receipts are certain payments made to the federal government by citizens or businesses and certain payments made by federal agencies to other federal agencies; they are recorded as negative outlays (that is, credits against direct spending). Such receipts include beneficiaries' premiums for Medicare and the CLASS program; intragovernmental payments made by federal agencies for their employees' retirement benefits; royalties and other charges for production of oil and natural gas on federal lands; proceeds from sales of harvested timber and minerals extracted from federal lands; and various fees paid by users of public property and services. In 2010, offsetting receipts totaled \$184 billion (see Table 3-5).

Offsetting receipts for Medicare in 2010 reached \$74 billion, constituting about 40 percent of all offsetting

**Table 3-5.****CBO's Baseline Projections of Offsetting Receipts**

(Billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Medicare <sup>a</sup>	-74	-80	-89	-92	-96	-101	-106	-118	-128	-139	-151	-167	-483	-1,186
Federal Share of Federal Employees' Retirement														
Social Security	-15	-15	-15	-16	-17	-17	-18	-19	-20	-21	-22	-23	-83	-189
Military retirement	-20	-21	-22	-22	-22	-23	-23	-24	-24	-25	-26	-27	-112	-238
Civil Service retirement and other	-26	-26	-27	-28	-29	-30	-31	-33	-35	-37	-38	-40	-145	-328
Subtotal	-61	-62	-64	-66	-68	-70	-73	-76	-80	-83	-87	-90	-340	-755
MERHCF	-11	-11	-11	-12	-13	-14	-14	-15	-16	-17	-18	-20	-65	-152
CLASS	0	0	-6	-9	-11	-12	-12	-12	-12	-12	-13	-13	-50	-112
Receipts Related to Natural Resources <sup>b</sup>	-11	-11	-13	-15	-15	-16	-17	-17	-18	-19	-19	-20	-77	-171
Other	-27	-26	-28	-28	-27	-27	-27	-29	-30	-31	-29	-29	-136	-284
<b>Total</b>	<b>-184</b>	<b>-191</b>	<b>-211</b>	<b>-222</b>	<b>-230</b>	<b>-240</b>	<b>-249</b>	<b>-267</b>	<b>-285</b>	<b>-302</b>	<b>-317</b>	<b>-338</b>	<b>-1,151</b>	<b>-2,659</b>

Source: Congressional Budget Office.

Note: MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund (including TRICARE for Life); CLASS = Community Living Assistance Services and Supports.

- a. Includes Medicare premiums and amounts paid by states from savings on Medicaid prescription drug costs.
- b. Includes timber, mineral, and Outer Continental Shelf receipts and proceeds from sales of public land.

receipts. Over the coming years, those receipts will rise at about the same rate as spending for Medicare, totaling \$167 billion in 2021, in CBO's baseline projections. The bulk of those receipts are premiums paid by Medicare beneficiaries, but the amount also includes recoveries of overpayments made to providers and payments made by states to cover a portion of the prescription drug costs of low-income seniors.

In 2010, \$61 billion in offsetting receipts consisted of intragovernmental transfers from federal agencies to the federal funds that are the source of employees' retirement benefits (mostly trust funds for Social Security and for military and civilian retirement). Those intragovernmental payments from agencies' operating accounts to the trust funds (or similar funds) have no net effect on outlays in the budget. Such payments will grow by nearly 4 percent per year, on average, CBO estimates, reaching \$90 billion in 2021. Intragovernmental transfers also are made to the Department of Defense's Medicare-Eligible Retiree Health Care Fund under the TRICARE for Life

program; those payments are made on an accrual basis according to the current number of military personnel and are intended to pay for the health care costs of future retirees. Such payments totaled \$11 billion in 2010 and, because of rising health care costs, are projected to grow to \$20 billion by 2021.

Premiums for the CLASS program for long-term care insurance are set by the Secretary of Health and Human Services at an amount that is estimated to equal or exceed the expected cash payments for future benefits and the administrative costs of operating the program (taking into account interest earned on income from premiums). Receipts from those premiums are expected to total \$112 billion between 2012 and 2021.

Receipts stemming from the extraction of natural resources—particularly oil, natural gas, and minerals—from federally owned land totaled \$11 billion in 2010. By 2021, CBO estimates, those receipts will be \$20 billion.

### Legislation Assumed in the Baseline

In keeping with precedents established by the Deficit Control Act, CBO's baseline projections assume that some mandatory programs will be extended when their authorization expires, although the assumptions apply differently to programs created before and after the Balanced Budget Act of 1997. All direct spending programs that predate that act and have current-year outlays greater than \$50 million are assumed to continue in CBO's baseline projections. For programs established after 1997, continuation is assessed program by program, in consultation with the House and Senate Budget Committees.

CBO's baseline projections therefore incorporate the assumption that the following programs whose authorization expires within the current projection period will continue: SNAP, TANF, CHIP, rehabilitation services, child care entitlement grants to states, trade adjustment assistance for workers, child nutrition, and family preservation and support. Most farm subsidies are assumed to continue as well. In addition, the Deficit Control Act directed CBO to assume that a cost-of-living adjustment for veterans' compensation would be granted each year. In CBO's projections, the assumption that expiring programs will continue has little effect on mandatory spending totals in 2011; however, that assumption increases projected mandatory outlays by \$118 billion in 2021 (or by about 3 percent of mandatory outlays) and by about \$1.0 trillion between 2012 and 2021 (see Table 3-6).

### Discretionary Spending

Nearly 40 percent of federal outlays are funded by budget authority provided in annual appropriation acts. That funding—referred to as discretionary—translates into outlays when the money is spent. Although some appropriations (for example, those designated for employees' salaries) are spent quickly, others (such as those intended for major construction projects) are disbursed over several years. In any given year, discretionary outlays include spending both from new budget authority and from budget authority provided in previous appropriations.

Currently, the federal government is operating under a continuing resolution, which, for the most part, holds discretionary budget authority at 2010 levels until March 4, 2011; no funding has yet been provided for those discretionary programs and activities beyond that date. For the purposes of its baseline projections, CBO

assumes that full-year funding for 2011 will remain at the levels provided in the continuing resolution (see Table 3-7 on page 78). Even though discretionary budget authority would be about the same as it was last year, CBO projects that discretionary outlays would rise from \$1.35 trillion in 2010 to \$1.38 trillion in 2011, mostly because of funding from previous appropriations. That increase is concentrated in defense spending, which is projected to rise from \$689 billion in 2010 to \$712 billion in 2011. Nondefense spending only inches up between 2010 and 2011, from \$660 billion to \$663 billion. As a share of the economy, total discretionary spending is projected to drop from 9.3 percent of GDP in 2010 to 9.1 percent in 2011, as outlays arising from the funding provided by ARRA wane. Excluding the effects of ARRA, discretionary outlays would be the same share of GDP in 2011 as they were in 2010, 8.6 percent.

In the agency's baseline projections, appropriations for discretionary programs are assumed to grow each year with inflation, as specified in the Deficit Control Act. Under that assumption, discretionary outlays would total \$1.35 trillion in 2012, CBO projects—slightly less than the amount anticipated for 2011. That reduction stems primarily from a decline in outlays from budget authority provided by ARRA—from \$77 billion in 2011 to \$35 billion in 2012. After 2012, discretionary outlays are projected to steadily increase, reaching \$1.6 trillion by 2021. However, because discretionary funding is assumed to keep pace only with inflation (which is anticipated to grow more slowly than the economy), in CBO's baseline projections such outlays fall from 8.6 percent of GDP in 2012 to 6.7 percent of GDP in 2021.

### Trends in Discretionary Outlays

Discretionary outlays declined from about 10 percent of GDP during much of the 1970s and 1980s to 6.2 percent in 1999 (see Figure 3-3 on page 79). Those outlays then began to increase again relative to the size of the economy, reaching 7.0 percent of GDP in 2002 and 7.9 percent in 2008. That rise occurred in part because of actions taken in response to the terrorist attacks of September 11, 2001, and subsequent military operations in Afghanistan and Iraq. (Funding for those operations from 2001 to 2011 is examined in Box 3-2.) In 2009 and 2010, discretionary outlays jumped to 8.8 percent and 9.3 percent of GDP, respectively, in part because of \$281 billion in discretionary funding provided by ARRA in 2009. The 2010 figure was the highest since 1988.

**Table 3-6.****Costs for Mandatory Programs That Are Assumed to Continue Beyond Their Current Expiration Dates**

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	
												2012-	2012-
												2016	2021
Supplemental Nutrition Assistance Program													
Budget authority	0	0	80	70	69	68	67	65	64	64	63	288	610
Outlays	0	0	76	71	69	68	67	65	64	64	63	285	608
Temporary Assistance for Needy Families													
Budget authority	0	17	17	17	17	17	17	17	17	17	17	87	173
Outlays	0	13	16	17	17	17	17	17	17	17	17	81	168
Commodity Credit Corporation <sup>a</sup>													
Budget authority	0	0	2	10	11	11	11	12	12	13	13	34	95
Outlays	0	0	1	9	10	11	11	11	12	13	13	30	90
Children's Health Insurance Program													
Budget authority	0	0	0	0	0	6	6	6	6	6	6	6	34
Outlays	0	0	0	0	0	3	6	6	6	6	6	3	32
Veterans' Compensation COLAs													
Budget authority	0	1	1	2	3	4	5	6	8	9	10	11	49
Outlays	0	*	1	2	3	4	5	6	8	9	10	11	48
Rehabilitation Services and Disability Research													
Budget authority	0	3	3	3	3	3	3	3	4	4	4	16	34
Outlays	0	2	3	3	3	3	3	3	4	4	4	14	32
Child Care Entitlements to States													
Budget authority	0	3	3	3	3	3	3	3	3	3	3	15	29
Outlays	0	2	3	3	3	3	3	3	3	3	3	14	29
Trade Adjustment Assistance for Workers													
Budget authority	0	*	1	1	1	1	1	1	1	1	1	4	10
Outlays	0	*	1	1	1	1	1	1	1	1	1	4	9
Child Nutrition <sup>b</sup>													
Budget authority	0	0	0	0	0	1	1	1	1	1	1	1	5
Outlays	0	0	0	0	0	1	1	1	1	1	1	1	5

Continued

Table 3-6.

Continued

### Costs for Mandatory Programs That Are Assumed to Continue Beyond Their Current Expiration Dates

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total		
												2012-	2012-	
												2016	2021	
Ground Transportation Programs Not Subject to Annual Obligation Limitations														
Budget authority	*	1	1	1	1	1	1	1	1	1	1	3	6	
Outlays	*	*	1	1	1	1	1	1	1	1	*	3	6	
Family Preservation and Support														
Budget authority	0	*	*	*	*	*	*	*	*	*	*	2	3	
Outlays	0	*	*	*	*	*	*	*	*	*	*	1	3	
Ground Transportation Programs Controlled by Obligation Limitations <sup>c</sup>														
Budget authority	30	52	52	52	52	52	52	52	52	52	52	260	519	
Outlays	0	0	0	0	0	0	0	0	0	0	0	0	0	
Air Transportation Programs Controlled by Obligation Limitations <sup>c</sup>														
Budget authority	2	4	4	4	4	4	4	4	4	4	4	19	37	
Outlays	0	0	0	0	0	0	0	0	0	0	0	0	0	
Natural Resources														
Budget authority	*	*	*	*	*	*	*	*	*	*	*	*	*	
Outlays	*	*	*	*	*	*	*	*	*	*	*	*	*	
<b>Total</b>														
Budget authority	<b>32</b>	<b>81</b>	<b>164</b>	<b>164</b>	<b>164</b>	<b>171</b>	<b>171</b>	<b>171</b>	<b>172</b>	<b>173</b>	<b>174</b>	<b>744</b>	<b>1,605</b>	
Outlays	*	<b>19</b>	<b>101</b>	<b>107</b>	<b>107</b>	<b>113</b>	<b>115</b>	<b>115</b>	<b>116</b>	<b>118</b>	<b>118</b>	<b>447</b>	<b>1,029</b>	

Source: Congressional Budget Office.

Note: COLAs = cost-of-living adjustments; \* = between -\$500 million and \$500 million.

- Agricultural commodity price and income supports under the Farm Security and Rural Investment Act of 2002 (FSRIA) generally expire after 2012. Although permanent price support authority under the Agricultural Adjustment Act of 1938 and the Agricultural Act of 1949 would then become effective, CBO continues to adhere to the rule in section 257(b)(2)(iii) of the Deficit Control Act (now expired) that indicates that the baseline should assume that FSRIA's provisions remain in effect.
- Includes the Summer Food Service program and states' administrative expenses.
- Authorizing legislation provides contract authority, which is counted as mandatory budget authority. However, because spending is subject to obligation limitations specified in annual appropriation acts, outlays are considered discretionary.

**Box 3-2.****Funding for Operations in Afghanistan and Iraq and for Related Activities**

Since September 2001, lawmakers have provided almost \$1.3 trillion in budget authority for operations in Afghanistan and Iraq and related activities (see the table). That amount includes funding for military and diplomatic operations in Afghanistan, Iraq, and certain other regions; for some veterans' benefits and services; and for related actions of the Department of Justice. Appropriations specifically designated for those purposes averaged about \$100 billion a year from 2003 through 2006, rose to \$171 billion in 2007 and \$187 billion in 2008, and then declined to an average of \$160 billion for 2009 and 2010. The Continuing Appropriations and Surface Transportation Extensions Act, 2011 (Public Law 111-322), provides funding for war-related activities in the current fiscal year through March 4, 2011, at an annual rate of \$159 billion.

Funding to date for military operations and other defense activities totals \$1.1 trillion, most of which has gone to the Department of Defense (DoD). Lawmakers have also provided \$63 billion to train and equip indigenous security forces in Afghanistan and Iraq.<sup>1</sup> In addition, \$52 billion has been provided for diplomatic operations and foreign aid to Afghanistan, Iraq, and other countries that are assisting the United States in those efforts.

DoD reports that in fiscal year 2010, obligations for operations in Afghanistan and Iraq and for related

activities averaged \$12.5 billion per month. That monthly average is about \$1 billion more than the amount reported for 2009. Operation Enduring Freedom (in and around Afghanistan) accounted for 51 percent of the obligations in 2010—up from 34 percent in 2009 and 20 percent in 2008. Operation New Dawn (formerly Operation Iraqi Freedom) accounted for 49 percent of those obligations, down from 65 percent in 2009 and 80 percent in 2008. Additional security missions that have taken place in the United States since the terrorist attacks of September 11, 2001—such as combat air patrols over Washington, D.C., and New York City, known as Operation Noble Eagle—accounted for less than 1 percent of obligations in 2010.

Because most appropriations for operations in Afghanistan and Iraq and for related activities appear in the same budget accounts as appropriations for DoD's other functions, it is impossible to determine precisely how much has been spent on those activities. The Congressional Budget Office (CBO) estimates that the \$1.2 trillion appropriated for military operations, other defense activities, and indigenous security forces in those two countries has resulted in outlays of about \$895 billion through 2010; about \$165 billion of that occurred in 2010. Of the \$52 billion appropriated for international affairs activities related to the war efforts, about \$45 billion was spent through 2010, CBO estimates, including \$5 billion in 2010. In total, outlays for all of those activities amounted to about \$170 billion last year.

1. That \$63 billion includes \$5 billion provided for Iraqi security forces in 2004 in an appropriation for the State Department's Iraq Relief and Reconstruction Fund.

Continued

## Box 3-2.

Continued

## Funding for Operations in Afghanistan and Iraq and for Related Activities

### Estimated Appropriations Provided for U.S. Operations in Afghanistan and Iraq and for Other War-Related Activities, 2001 to 2011

(Billions of dollars of budget authority)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 <sup>a</sup>	Total, 2001- 2011
<b>Military Operations and Other Defense Activities<sup>b</sup></b>												
Iraq	0	0	51	70	50	85	113	133	90	58	43	693
Afghanistan	0	12	12	13	8	12	24	29	38	86	101	335
Other <sup>c</sup>	14	5	18	5	11	13	15	13	13	5	6	117
Subtotal	14	18	80	88	69	110	152	175	140	150	150	1,145
<b>Indigenous Security Forces<sup>d</sup></b>												
Iraq	0	0	0	5	6	3	6	3	1	1	1	25
Afghanistan	*	0	0	0	1	2	7	3	6	9	9	38
Subtotal	*	0	0	5	7	5	13	6	7	10	10	63
<b>Diplomatic Operations and Foreign Aid<sup>e</sup></b>												
Iraq	0	0	3	15	1	3	3	3	2	2	0	32
Afghanistan	0	*	1	2	1	*	1	1	5	2	0	13
Other	*	1	5	*	*	*	*	*	1	*	0	8
Subtotal	*	2	8	17	3	3	4	5	7	4	0	52
<b>Other Services and Activities<sup>f</sup></b>												
Iraq	0	0	*	0	*	*	1	1	*	0	0	2
Afghanistan	0	0	0	0	*	*	*	*	*	0	0	0
Other	0	0	0	0	*	*	*	*	*	0	0	1
Subtotal	0	0	*	0	*	*	1	2	*	0	0	3
<b>Total Budget Authority</b>	<b>14</b>	<b>19</b>	<b>88</b>	<b>110</b>	<b>79</b>	<b>118</b>	<b>170</b>	<b>187</b>	<b>154</b>	<b>164</b>	<b>159</b>	<b>1,263</b>

Source: Congressional Budget Office.

Note: \* = between zero and \$500 million.

- The Continuing Appropriations and Surface Transportation Extensions Act, 2011 (Public Law 111-322), provided funding for war-related operations through March 4, 2011, at an annual rate of \$159.4 billion, similar to the amount requested for such operations by the President for the current year. Final war-related appropriations for 2011 could be greater or less than that amount.
- CBO estimated funding provided for operations in Afghanistan and Iraq by allocating funds on the basis of information in budget justification materials from the Department of Defense and in monthly reports on its obligations. Some allocations for prior years have been adjusted on the basis of more recent information.
- Includes Operation Noble Eagle (homeland security missions, such as combat air patrols, in the United States), the restructuring of Army and Marine Corps units, classified activities other than those funded by appropriations for the Iraq Freedom Fund, efforts to increase the size of the Army and Marine Corps, and other operations. (For fiscal years 2005 through 2011, funding for Operation Noble Eagle has been intermingled with regular appropriations for the Department of Defense; that funding is not included in this table.)
- Funding for indigenous security forces is used to train and equip local military and police units in Afghanistan and Iraq. That funding was appropriated in accounts for diplomatic operations and foreign aid (budget function 150) in 2004 and in accounts for defense (budget function 050) starting in 2005.
- Beginning in 2010, most funding for diplomatic operations in, and foreign aid to, countries helping the United States fight terrorism has been in regular appropriations and cannot be separated from appropriations for activities unrelated to those operations.
- Includes funding for some veterans' benefits and services, as well as certain activities of the Department of Justice. Excludes about \$8 billion in spending by the Department of Veterans Affairs for the incremental costs for medical care, disability compensation, and survivor benefits for veterans of operations in Afghanistan and Iraq and the war on terrorism. That amount was based on CBO's estimates of spending from regular appropriations for the Department of Veterans Affairs and was not explicitly appropriated for war-related expenses.

**Table 3-7.****Change in Discretionary Budget Authority, 2010 to 2011**

(Billions of dollars)

	Actual, 2010	Estimated, 2011 <sup>a</sup>	Percentage Change
Defense			
War-related	159	159	0.0
Other	555	550	-1.0
Subtotal	715	710	-0.7
Nondefense	549	545	-0.6
<b>Total</b>	<b>1,263</b>	<b>1,255</b>	<b>-0.7</b>

Source: Congressional Budget Office.

Note: Budget authority is authority provided by law to incur financial obligations that will result in immediate or future outlays of federal government funds. It does not include obligation limitations for certain transportation programs.

a. Amounts shown assume that the levels of funding in the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (Public Law 111-322), are provided for the full fiscal year.

Trends in discretionary spending during the past few decades have been heavily influenced by spending on defense. In 1971, defense discretionary outlays accounted for 7.3 percent of GDP; however, that share fell rapidly over the following several years, dropping to 4.7 percent of GDP by 1978. Such spending then rose, reaching 6.2 percent in 1986. From that point, defense outlays resumed their slide to a low of 3.0 percent of GDP between 1999 and 2001. In 2002, those outlays rose back to 3.3 percent of GDP, not only because of operations in Afghanistan and other war-related activities, but also because of initiatives that were planned before September 11, 2001. Outlays for defense activities continued to climb as military operations began in Iraq, and by 2005, defense outlays equaled 4.0 percent of GDP. Such outlays subsequently increased further relative to the size of the economy, reaching 4.7 percent of GDP (or \$689 billion) in 2010.

Nondefense discretionary programs encompass such activities as transportation, education grants, housing assistance, health-related research, most homeland security activities, the federal justice system, foreign aid, and management of public lands. Spending for such programs rose from 4.0 percent of GDP in 1971 to a high of 5.2 percent of GDP in 1980 before declining. Non-defense outlays as a share of GDP fell through the rest of the 1980s and were relatively stable from 1990 through 2008, ranging between 3.2 percent and 3.8 percent.

However, in the past two years, funding from ARRA helped push that share higher—to 4.5 percent of GDP (or \$660 billion) in 2010.

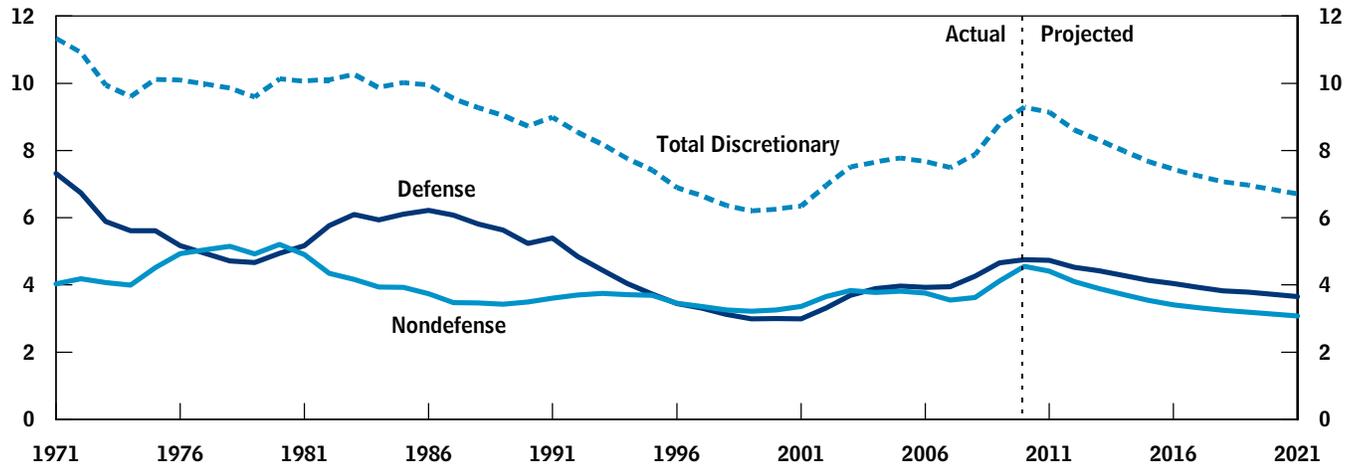
**Defense Discretionary Funding in 2011**

Budget authority provided for defense discretionary programs is about 1 percent lower thus far in 2011 (on an annualized basis) than it was in 2010, slipping from \$715 billion to \$710 billion. That change primarily results from a decrease in funding for Base Realignment and Closure (BRAC) activities. Even though most defense discretionary funding was maintained at the 2010 level by the continuing resolution, funding for BRAC was reduced because the Congress had previously provided funds for the most expensive actions needed to implement the most recent round of base closures.

Three major categories of funding within the Department of Defense account for 82 percent of the defense appropriation in 2011: funding for operations and maintenance (\$296 billion), military personnel (\$152 billion), and procurement (\$132 billion). Appropriations for research and development (\$81 billion) account for another 11 percent of total funding for defense. The programs that constitute the rest of the appropriation (about 7 percent) are funding for military construction, family housing, and other programs (\$24 billion); funding for the atomic energy activities of the Department of Energy

**Figure 3-3.****Defense, Nondefense, and Total Discretionary Spending**

(Percentage of gross domestic product)



Source: Congressional Budget Office.

(\$17 billion); and funding for various defense-related programs in other departments and agencies (\$7 billion).

**Nondefense Discretionary Funding in 2011**

Seven broad budget categories (called “budget functions”) account for more than 75 percent of the \$599 billion in resources provided thus far in 2011 (on an annualized basis) for nondefense discretionary activities (see Table 3-8). Education, training, employment, and social services together have received \$95 billion in estimated full-year funding, claiming 16 percent of total nondefense discretionary funding.<sup>19</sup> Transportation programs have received \$90 billion (or 15 percent) of the total, which includes \$54 billion in obligation limitations for several surface and air transportation programs. Although those programs receive mandatory budget authority through authorizing legislation, the annual appropriation acts govern spending because they limit how much of that authority the Department of Transportation can obligate. Those obligation limitations are treated as a measure of discretionary budgetary resources, and the resulting outlays are classified as discretionary.

Income-security programs (mostly for housing and nutrition assistance) have received \$65 billion, representing

11 percent of the total.<sup>20</sup> Appropriations for health-related research and public health as well as veterans’ benefits sum to \$58 billion and \$57 billion, respectively, each constituting 10 percent of the total. Finally, international affairs and administration of justice each account for roughly 9 percent of total discretionary funding for nondefense activities.

**Alternative Paths for Discretionary Spending**

CBO estimates that total funding for discretionary activities in 2011 amounts to about \$1.31 trillion (on an annualized basis)—\$1.255 trillion in budget authority and \$0.054 trillion in transportation-related obligation limitations. In the agency’s baseline projections, such funding is assumed to grow each year with inflation. But unlike funding for many mandatory programs, discretionary funding is set each year, and the policy decisions made from year to year may differ greatly from an inflation-based projection. To illustrate such differences, CBO has estimated the budgetary consequences of several alternative paths for discretionary funding (see Table 3-9 on page 82).

The first alternative path assumes that, after 2011, most funding will grow in line with nominal GDP (an average

19. Student loans and several other programs in that category are not included in that total because their funding is considered mandatory.

20. Other income-security programs, such as unemployment compensation and TANF, are not included in the total because they are included in mandatory spending.

**Table 3-8.****Nondefense Discretionary Funding for 2010 and 2011**

(Billions of dollars)

	2010	2011 <sup>a</sup>	Difference
Education, Training, Employment, and Social Services	89	95	6
Transportation	90	90	*
Income Security	66	65	-1
Health	58	58	*
Veterans' Benefits and Services	53	57	4
International Affairs	57	55	-2
Administration of Justice	52	52	-1
Natural Resources and Environment	37	36	*
General Science, Space, and Technology	31	31	0
General Government	19	19	*
Community and Regional Development	21	16	-5
Agriculture	7	7	*
Medicare	6	6	*
Social Security	6	6	*
Energy	4	5	1
Commerce and Housing Credit	7	1	-5
<b>Total</b>	<b>603</b>	<b>599</b>	<b>-4</b>

Source: Congressional Budget Office.

Notes: Includes budgetary resources provided by obligation limitations for certain ground and air transportation programs.

\* = between -\$500 million and \$500 million.

a. Amounts shown assume that the levels of funding in the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (Public Law 111-322), are provided for the full fiscal year.

of 4.7 percent a year). Under that scenario, discretionary outlays would exceed figures in CBO's baseline by about \$1.8 trillion through 2021. Added debt-service costs would bring the cumulative increase in total outlays to about \$2.1 trillion over the coming decade.

The second alternative path addresses spending for operations in Afghanistan and Iraq and for other war-related activities. The outlays projected in the baseline come from several sources: budget authority provided for those purposes in 2010 and prior years; the \$159 billion (annualized) in budget authority provided for 2011 in the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (P.L. 111-322); and the \$1.8 trillion that would be appropriated over the 2012–2021 period if annual funding is set at \$159 billion plus adjustments for anticipated inflation. However, the funding required for war-related activities in coming years may be smaller than the amounts in the baseline if the number of

deployed troops and the pace of operations—in Afghanistan, Iraq, or other countries—diminish over time.

In 2010, the number of U.S. troops (active-duty, reserves, and National Guard personnel) deployed for war-related activities averaged about 215,000, CBO estimates. In the alternative scenario presented here, the number of military personnel deployed for war-related purposes would decline over a five-year period to an average of 180,000 in 2011, 130,000 in 2012, 100,000 in 2013, 65,000 in 2014, and 45,000 in 2015 and thereafter. (Those levels could represent various allocations of forces among Afghanistan, Iraq, and other countries. Of course, many other scenarios—some costing more and some less—are possible.) Under this scenario, total discretionary outlays over the 2012–2021 period would be \$1.1 trillion less than the amount in the baseline. Debt-service costs would bring the cumulative savings relative to the baseline to about \$1.4 trillion over the coming decade.

The final scenario assumes that most discretionary budget authority and obligation limitations would be frozen at the 2011 levels for the entire projection period.<sup>21</sup> In that case, total discretionary outlays for the 10-year period would be about \$1.4 trillion lower than those projected in the baseline. Debt-service adjustments would reduce spending by another \$229 billion, for a total of \$1.6 trillion. Under that scenario, total discretionary spending would fall to about 5.5 percent of GDP by 2021.

## Net Interest

Outlays for net interest were \$197 billion in 2010 and are projected to be \$225 billion in 2011, an increase of 14 percent (see Table 3-10). As a share of GDP, net interest was 1.4 percent in 2010 and is projected to be 1.5 percent in 2011.

Net interest outlays are dominated by the interest paid to holders of the debt that the Department of the Treasury issues to the public. The Treasury also pays interest on debt issued to trust funds and other government accounts, but such payments are intragovernmental transactions that have no effect on net interest or the budget deficit. Other federal accounts also pay and receive interest for various reasons.<sup>22</sup>

The federal government's interest payments depend primarily on market interest rates and on the amount of debt held by the public; however, other factors, such as the rate of inflation and the maturity structure of outstanding securities, also affect interest costs. (For example, longer-term securities generally carry higher interest rates than do shorter-term securities.) Interest rates are determined by a combination of market forces and the policies of the Federal Reserve System. Debt held by the public is determined mostly by cumulative budget deficits, which depend on policy choices about spending and revenues and on economic conditions and other factors.

21. Some items, such as offsetting collections and payments made by the Treasury on behalf of the Department of Defense's TRICARE for Life program, would not be held constant at the 2011 amounts.

22. For additional information, see Congressional Budget Office, *Federal Debt and Interest Costs* (December 2010).

Although debt held by the public surged in the past few years to its highest level relative to GDP since the early 1950s, outlays for net interest remained low relative to GDP because interest rates on Treasury securities fell to remarkably low levels. Rates on 3-month Treasury bills plummeted from an average of almost 5 percent in 2007 to an average of just over 0.1 percent in 2010. Similarly, rates on 10-year Treasury notes and 30-year bonds dropped from an average of about 5 percent in 2007 to an average of about 3 percent and 4 percent, respectively, in 2010. As a result, even though debt held by the public rose dramatically relative to the overall economy—climbing from 36 percent of GDP at the end of 2007 to 62 percent at the end of 2010—outlays for net interest as a share of GDP fell from 1.7 percent in 2007 to 1.4 percent in 2010.

## Baseline Projections of Net Interest

Under CBO's baseline assumptions, net interest costs are expected to increase significantly through 2021. Rapidly rising debt and higher interest rates are projected to boost net interest costs from \$225 billion in 2011 to just over \$790 billion in 2021. Debt held by the public is projected to double from \$9 trillion at the end of 2010 to \$18 trillion at the end of 2021.<sup>23</sup> In addition, CBO estimates that the interest rate paid on 3-month Treasury bills will rise from less than 0.25 percent in 2011 to 4.4 percent in 2021, and the rate on 10-year Treasury notes will increase from 3.2 percent to 5.4 percent. As a result, under current law, net interest as a share of GDP is projected to reach 3.3 percent in 2021, more than double its share in 2011.

## Interest on Governmental Holdings

The Treasury has issued about \$4.5 trillion in securities to federal trust funds and other government accounts. The interest paid on those securities has no net impact on federal spending because it is credited to accounts elsewhere in the budget. In 2011, trust funds will be credited with \$189 billion of such intragovernmental interest, CBO estimates, mostly for the Social Security and Civil Service Retirement and Disability trust funds. Over the

23. Debt held by the public does not include securities issued by the Treasury to federal trust funds and other government accounts. Those securities are included as part of the measure of gross debt (see Appendix C).

**Table 3-9.****CBO's Projections of Discretionary Spending Under Selected Policy Alternatives**

(Billions of dollars)

	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	
													2012- 2016	2012- 2021
<b>Baseline (Discretionary Resources Grow at the Rate of Inflation After 2011)<sup>a</sup></b>														
Budget Authority														
Defense	715	710	721	735	750	765	783	803	824	845	866	887	3,753	7,978
Nondefense	549	545	552	562	574	587	600	616	632	649	665	682	2,876	6,121
<b>Total</b>	<b>1,263</b>	<b>1,255</b>	<b>1,272</b>	<b>1,297</b>	<b>1,324</b>	<b>1,352</b>	<b>1,383</b>	<b>1,419</b>	<b>1,456</b>	<b>1,494</b>	<b>1,532</b>	<b>1,570</b>	<b>6,629</b>	<b>14,099</b>
Outlays														
Defense	689	712	710	725	738	752	773	787	801	827	848	869	3,698	7,830
Nondefense	660	663	643	638	640	645	653	666	680	697	714	731	3,219	6,707
<b>Total</b>	<b>1,349</b>	<b>1,375</b>	<b>1,352</b>	<b>1,364</b>	<b>1,378</b>	<b>1,397</b>	<b>1,426</b>	<b>1,453</b>	<b>1,482</b>	<b>1,524</b>	<b>1,562</b>	<b>1,600</b>	<b>6,917</b>	<b>14,538</b>
<b>Most Discretionary Resources Grow at the Rate of Nominal Gross Domestic Product After 2011<sup>b</sup></b>														
Budget Authority														
Defense	715	710	736	764	799	836	873	910	947	985	1,025	1,065	4,008	8,940
Nondefense	549	545	569	596	630	667	704	738	773	809	847	886	3,166	7,219
<b>Total</b>	<b>1,263</b>	<b>1,255</b>	<b>1,305</b>	<b>1,361</b>	<b>1,429</b>	<b>1,502</b>	<b>1,577</b>	<b>1,648</b>	<b>1,720</b>	<b>1,794</b>	<b>1,871</b>	<b>1,951</b>	<b>7,174</b>	<b>16,159</b>
Outlays														
Defense	689	712	719	747	777	810	851	883	914	957	995	1,035	3,905	8,688
Nondefense	660	663	652	661	682	708	738	772	806	841	878	917	3,441	7,655
<b>Total</b>	<b>1,349</b>	<b>1,375</b>	<b>1,371</b>	<b>1,409</b>	<b>1,458</b>	<b>1,518</b>	<b>1,589</b>	<b>1,655</b>	<b>1,720</b>	<b>1,798</b>	<b>1,873</b>	<b>1,951</b>	<b>7,346</b>	<b>16,342</b>
<b>Reduce the Number of Troops Deployed for Certain Overseas Military Operations to 45,000 by 2015</b>														
Budget Authority														
Defense	715	710	677	653	637	633	643	659	677	695	712	731	3,243	6,716
Nondefense	549	545	552	562	574	587	600	616	632	649	665	682	2,876	6,121
<b>Total</b>	<b>1,263</b>	<b>1,255</b>	<b>1,228</b>	<b>1,215</b>	<b>1,212</b>	<b>1,220</b>	<b>1,243</b>	<b>1,275</b>	<b>1,309</b>	<b>1,344</b>	<b>1,378</b>	<b>1,413</b>	<b>6,118</b>	<b>12,837</b>
Outlays														
Defense	689	712	689	671	651	639	644	649	659	681	698	716	3,294	6,697
Nondefense	660	663	643	638	640	645	653	666	680	697	714	731	3,219	6,707
<b>Total</b>	<b>1,349</b>	<b>1,375</b>	<b>1,332</b>	<b>1,310</b>	<b>1,292</b>	<b>1,284</b>	<b>1,296</b>	<b>1,315</b>	<b>1,340</b>	<b>1,377</b>	<b>1,412</b>	<b>1,447</b>	<b>6,513</b>	<b>13,404</b>

Continued

Table 3-9.

Continued

**CBO's Projections of Discretionary Spending Under Selected Policy Alternatives**

(Billions of dollars)

	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	
													2012- 2016	2012- 2021
<b>Freeze Most Discretionary Resources at the Level Provided for 2011<sup>c</sup></b>														
Budget Authority														
Defense	715	710	710	710	711	712	713	713	714	715	716	718	3,556	7,133
Nondefense	549	545	544	543	544	544	544	544	544	544	544	544	2,718	5,437
<b>Total</b>	<b>1,263</b>	<b>1,255</b>	<b>1,253</b>	<b>1,254</b>	<b>1,255</b>	<b>1,255</b>	<b>1,256</b>	<b>1,257</b>	<b>1,258</b>	<b>1,259</b>	<b>1,260</b>	<b>1,262</b>	<b>6,273</b>	<b>12,570</b>
Outlays														
Defense	689	712	703	707	707	707	712	708	704	709	710	712	3,536	7,079
Nondefense	660	663	637	624	614	606	601	599	596	596	595	595	3,083	6,063
<b>Total</b>	<b>1,349</b>	<b>1,375</b>	<b>1,340</b>	<b>1,331</b>	<b>1,322</b>	<b>1,313</b>	<b>1,312</b>	<b>1,307</b>	<b>1,300</b>	<b>1,305</b>	<b>1,306</b>	<b>1,306</b>	<b>6,618</b>	<b>13,142</b>

Source: Congressional Budget Office.

Note: Nondefense discretionary outlays are usually higher than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund that is subject to obligation limitations set in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is not considered discretionary.

- Inflation in CBO's baseline is projected using the inflators specified in the Balanced Budget and Emergency Deficit Control Act of 1985: the gross domestic product price index and the employment cost index for wages and salaries.
- This alternative assumes that appropriations for operations in Afghanistan and Iraq enacted for 2011 are projected at baseline levels (that is, increased at the rate of inflation).
- Some items, such as offsetting collections and payments made by the Treasury on behalf of the Department of Defense's TRICARE for Life program, would not be held constant.

10-year baseline period, interest credited to trust funds will total nearly \$2 trillion, CBO projects.

**Other Interest**

The \$34 billion in other interest that CBO anticipates the government will receive in 2011 represents the net result of many transactions, including interest collections and interest payments.

The largest interest collections come from the government's credit financing accounts, which have been established to record the cash transactions related to federal direct loan and loan guarantee programs. For those programs, net subsidy costs are recorded in the budget, but the cash flows that move through the credit financing accounts are not. Credit financing accounts both pay

interest to and receive interest from Treasury accounts that appear in the budget; but, on net, more interest is paid to the Treasury than is received from it. CBO estimates that such receipts will total \$13 billion in 2011, steadily increasing to \$81 billion in 2021. In the near term, interest payments attributable to the federal student loan program dominate the annual totals.

Among the interest outflows from the government are payments for interest on tax refunds issued more than 45 days after the date on which the corresponding tax returns are filed and interest payments made for bonds issued following the savings and loan crisis of the 1980s. Together, those payments are expected to total nearly \$6 billion in 2011 and to average \$6 billion to \$7 billion per year thereafter.

**Table 3-10.****CBO's Baseline Projections of Federal Interest Outlays**

(Billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-	2021-
Interest on Treasury Debt Securities <sup>a</sup> (Gross interest)	413	448	482	542	626	700	782	863	933	1,005	1,071	1,129	3,132	8,133
Interest Received by Trust Funds														
Social Security	-119	-118	-117	-116	-118	-121	-127	-133	-142	-150	-157	-164	-598	-1,344
Other trust funds <sup>b</sup>	-67	-71	-58	-50	-54	-51	-49	-50	-47	-52	-52	-52	-263	-515
Subtotal	-185	-189	-175	-166	-172	-172	-176	-183	-189	-202	-209	-216	-860	-1,859
Other Interest <sup>c</sup>	-30	-34	-42	-51	-60	-69	-78	-88	-97	-106	-111	-120	-300	-822
Other Investment Income <sup>d</sup>	-2	-1	*	-1	-1	-1	-1	-1	-1	*	*	*	-3	-5
<b>Total Net Interest Outlays</b>	<b>197</b>	<b>225</b>	<b>264</b>	<b>325</b>	<b>394</b>	<b>459</b>	<b>527</b>	<b>592</b>	<b>646</b>	<b>697</b>	<b>751</b>	<b>792</b>	<b>1,969</b>	<b>5,447</b>

Source: Congressional Budget Office.

Note: \* = between -\$500 million and zero.

- Excludes interest costs on debt issued by agencies other than the Treasury (primarily the Tennessee Valley Authority).
- Mainly the Civil Service Retirement, Military Retirement, Medicare, and Unemployment Insurance trust funds.
- Primarily interest on loans to the public.
- Earnings on private investments by the National Railroad Retirement Investment Trust.

## The Revenue Outlook

**F**ederal revenues will total about \$2.2 trillion in fiscal year 2011, the Congressional Budget Office (CBO) estimates, an increase of 3 percent from the 2010 level, under the assumption that current laws remain unchanged. As a percentage of gross domestic product (GDP), however, revenues are expected to be slightly lower in 2011 than they were in 2010 (see Figure 4-1). For the third consecutive year, revenues would be just under 15 percent of GDP; levels that low have not been seen since 1950.

Revenues from individual income taxes are projected to rise by about 11 percent in 2011—boosting revenues as a share of GDP by 0.4 percentage points—largely as a result of the economic recovery and the expiration of the Making Work Pay tax credit enacted in the American Recovery and Reinvestment Act of 2009 (ARRA, Public Law 111-5). Social insurance (payroll tax) receipts, however, are projected to decline by 5 percent, reducing revenues as a share of GDP by 0.5 percentage points; those receipts are mostly from the payroll taxes for Social Security and for Medicare’s Hospital Insurance program. That decline stems from the enactment in December of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312, hereafter referred to as the 2010 tax act), which reduced the Social Security payroll tax rate that applies to employees from 6.2 percent to 4.2 percent for calendar year 2011.

Under the baseline assumption that current laws remain unchanged, total revenues are projected to rise by 54 percent between 2011 and 2014, much faster than GDP. As a result, in CBO’s baseline, revenues climb from 14.8 percent of GDP in 2011 to 19.9 percent in 2014. In only two years since 1946 have federal revenues reached or exceeded 19.9 percent of GDP; during the past 40 years, revenues have averaged 18 percent of GDP. Of the 5 percentage-point increase in revenues relative to GDP projected for 2011 to 2014, about three-quarters

stems from the expiration of tax provisions initially enacted during the past 10 years and, to a lesser extent, from other scheduled changes in law. The remainder results largely from factors related to the economic recovery (such as rising wages and salaries and increased realizations of capital gains).<sup>1</sup>

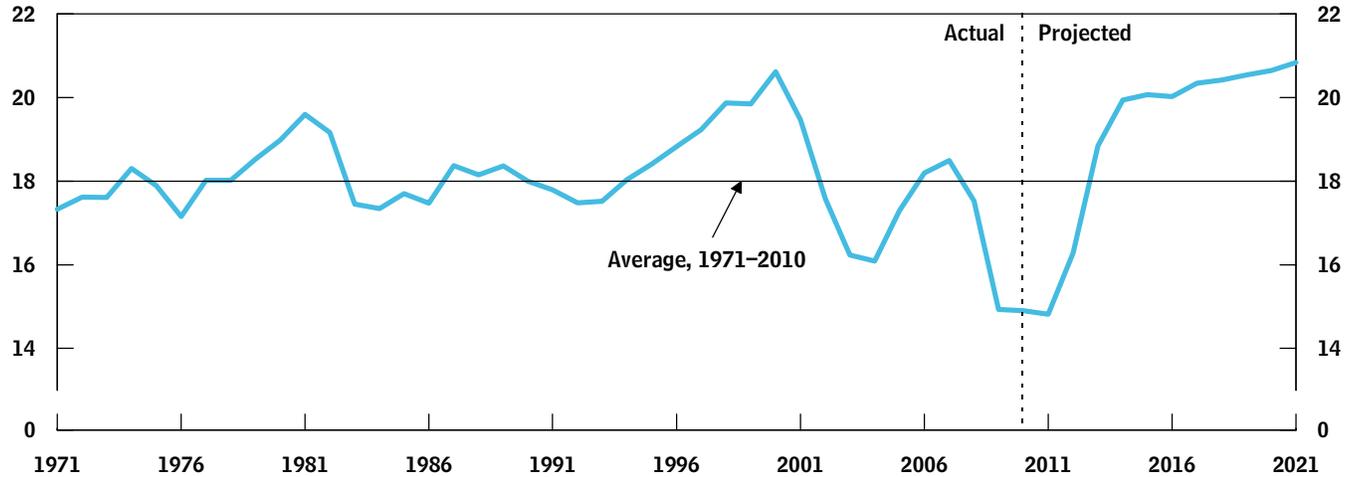
Multiple provisions of tax law enacted over the past decade are scheduled to expire over the next two years; in addition, new tax provisions are scheduled to take effect during the next three years. The net effect of those scheduled changes, in CBO’s estimation, will be to boost revenues as a share of GDP above their 2011 level by about 1 percentage point in 2012, by another 2 percentage points in 2013, and by an additional three-quarters of a percentage point in 2014 (see Box 4-1).

Among the provisions scheduled to expire is the reduced employee payroll tax rate enacted in the 2010 tax act. That reduction is only in effect through the end of calendar year 2011, as is the most recent temporary relief from the alternative minimum tax (AMT) on individuals. (Unless otherwise noted, scheduled changes in law discussed in this chapter occur at the end of calendar years.) Other revenue-reducing provisions expire at the end of 2012—provisions that were originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), or ARRA, and that were recently extended for two years in the 2010 tax act. (For a description of the provisions and estimated budgetary effects of the 2010 tax act, see Box 1-1 on page 8.) Certain business tax incentives and other provisions enacted over the past several years also expire at the end of

1. A capital gain is typically the increase in the value of an asset between the time it is purchased and sold—thus, the difference between the sale price and the cost of acquiring the asset (the basis of the asset).

**Figure 4-1.****Total Revenues as a Share of Gross Domestic Product**

(Percent)



Source: Congressional Budget Office.

2011 or the end of 2012. In addition, some taxes, fees, and tax credits enacted in the Patient Protection and Affordable Care Act (PPACA, P.L. 111-148) and the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152) are scheduled to take effect in 2013 and 2014.

Although the scheduled changes in tax provisions dominate the revenue outlook for the next few years, other factors also cause projected revenues as a share of GDP to climb significantly in each year through 2014, together accounting for an increase of about one and a quarter percentage point. First, CBO expects that as the economic recovery takes hold and the prices of financial assets rise, wage and salary income, realizations of capital gains, and other types of income will grow at a faster pace than will GDP, as they have in previous recoveries. Second, average tax rates on individuals are projected to rise as a result of the phenomenon known as “real bracket creep,” in which the growth of real (inflation-adjusted) incomes causes more income to be taxed in higher tax brackets; that effect will be more pronounced than usual in the next few years because of rising incomes during the economic recovery. Third, CBO anticipates that the recent weakness in individual and corporate income tax collections that is not explained by currently available economic data and that probably results largely from unmeasured factors related to the recession and the econ-

omy’s slow recovery, will gradually dissipate over the next several years as the recovery gains strength.

Of the projected jump in tax revenues from 14.8 percent of GDP in 2011 to 19.9 percent in 2014, individual income taxes account for about three-fifths; the increase in those receipts stems mostly from scheduled changes in law but also from factors related to the economic recovery (see Table 4-1). (By 2014, receipts from individual income taxes are projected to be 67 percent higher than in 2011.) Receipts from social insurance taxes and from corporate income taxes each account for roughly one-fifth of the increase, in both cases reflecting mainly the expiration of tax provisions enacted in recent years to provide economic stimulus. Estate and gift taxes, excise taxes, and miscellaneous fees and fines show much smaller increases as shares of GDP; those upticks, which are due primarily to scheduled changes in tax provisions, are largely offset by a decline in the Federal Reserve’s earnings that is expected to bring its remittances to the government closer to their typical relationship to GDP.

According to CBO’s baseline projections, revenues will continue to grow faster than GDP after 2014—but not as fast as in the 2012–2014 period—reaching 20.8 percent of GDP in 2021. (Between 2014 and 2021, revenues are projected to grow at an average annual rate of 5.4 percent, whereas nominal GDP is estimated to grow at an average rate of 4.7 percent.) That continued increase in revenues relative to GDP stems largely from features of

**Table 4-1.****CBO's Projections of Revenues**

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
In Billions of Dollars														
Individual Income Taxes	899	998	1,128	1,516	1,671	1,829	1,967	2,105	2,231	2,365	2,509	2,662	8,110	19,983
Social Insurance Taxes	865	819	943	1,029	1,092	1,148	1,204	1,256	1,309	1,364	1,424	1,484	5,416	12,253
Corporate Income Taxes	191	201	279	343	428	398	370	413	417	420	420	437	1,817	3,923
Other Receipts														
Excise taxes	67	73	80	86	95	100	102	106	110	113	116	120	463	1,028
Estate and gift taxes	19	11	12	14	42	48	53	57	61	65	69	73	168	492
Federal Reserve	76	80	63	51	39	36	37	33	38	44	50	54	225	445
Customs duties	25	29	31	33	36	40	44	49	52	56	60	64	185	467
Other miscellaneous	20	18	19	20	39	51	55	55	57	62	64	69	184	493
Subtotal	207	211	205	203	251	276	292	301	318	340	359	380	1,227	2,925
<b>Total</b>	<b>2,162</b>	<b>2,228</b>	<b>2,555</b>	<b>3,090</b>	<b>3,442</b>	<b>3,651</b>	<b>3,832</b>	<b>4,075</b>	<b>4,275</b>	<b>4,489</b>	<b>4,712</b>	<b>4,963</b>	<b>16,570</b>	<b>39,084</b>
On-budget	1,530	1,662	1,887	2,358	2,673	2,840	2,977	3,178	3,336	3,508	3,687	3,893	12,735	30,338
Off-budget <sup>a</sup>	632	566	668	732	769	811	855	897	938	981	1,025	1,069	3,835	8,745
<b>Memorandum:</b>														
Gross Domestic Product	14,513	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810	86,686	196,138
As a Percentage of GDP														
Individual Income Taxes	6.2	6.6	7.2	9.2	9.7	10.1	10.3	10.5	10.7	10.8	11.0	11.2	9.4	10.2
Social Insurance Taxes	6.0	5.4	6.0	6.3	6.3	6.3	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.2
Corporate Income Taxes	1.3	1.3	1.8	2.1	2.5	2.2	1.9	2.1	2.0	1.9	1.8	1.8	2.1	2.0
Other Receipts														
Excise taxes	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Estate and gift taxes	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Federal Reserve	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
Customs duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Other miscellaneous	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Subtotal	1.4	1.4	1.3	1.2	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.4	1.5
<b>Total</b>	<b>14.9</b>	<b>14.8</b>	<b>16.3</b>	<b>18.8</b>	<b>19.9</b>	<b>20.1</b>	<b>20.0</b>	<b>20.3</b>	<b>20.4</b>	<b>20.5</b>	<b>20.7</b>	<b>20.8</b>	<b>19.1</b>	<b>19.9</b>
On-budget	10.5	11.1	12.0	14.4	15.5	15.6	15.6	15.9	15.9	16.0	16.2	16.4	14.7	15.5
Off-budget <sup>a</sup>	4.4	3.8	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.5

Source: Congressional Budget Office.

a. Receipts from Social Security payroll taxes.

the individual income tax system that cause average tax rates to rise over time as incomes grow: specifically, continued real bracket creep, the growth of taxable retirement income (which is not a component of GDP) as the baby boomers retire in greater numbers, and a broader reach of the AMT. In contrast, corporate income tax receipts are projected to fall as a share of GDP beyond 2014, mainly because corporate profits are expected to decline relative to GDP over that period.

If a number of expiring tax provisions were made permanent—including the income tax provisions enacted in EGTRRA, JGTRRA, and ARRA and extended recently by the 2010 tax act; relief from the AMT; and the temporary changes to estate and gift taxes—the revenue outlook would be sharply different from the one projected under the current-law assumptions used for CBO's baseline. Revenues would still rise relative to GDP, as the economic recovery raised taxable incomes and as some recent tax

**Box 4-1.****Scheduled Changes in the Tax Code That Affect CBO's Revenue Baseline**

The Congressional Budget Office's (CBO's) baseline projections serve as a neutral benchmark that legislators and others can use to assess the potential effects of proposed alterations in the tax laws. Therefore, in preparing its revenue baseline, CBO assumes that current laws remain in effect—specifically, that scheduled changes in provisions of the tax code take effect and that no additional changes in those provisions are enacted.<sup>1</sup>

Some of those scheduled changes have substantial consequences for CBO's baseline projections. In particular, significant tax provisions that were originally enacted in three laws—the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs and Growth Tax Relief Reconciliation Act of 2003, and the American Recovery and Reinvestment Act of 2009 (Public Law 111-5)—and recently extended in the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312, hereafter referred to as the 2010 tax act) are scheduled to expire in coming years. Altogether, scheduled changes in tax provisions will increase revenues as a share of gross domestic product (GDP) by about 3.8 percentage points by 2014, CBO projects. Nearly all of that increase will persist to the end of CBO's current baseline projection period, in 2021.<sup>2</sup>

*Expiration of Lower Individual Income Tax Rates and Expanded Income Tax Credits and Deductions*—The expiration, after calendar year 2012, of provisions related to the individual income tax that were initially enacted in 2001, 2003, and 2009 will account for the largest share of the revenue increase relative to GDP—about 1.7 percentage points by 2014.<sup>3</sup> Those expiring provisions include the 10 percent bracket for the individual income tax, which under current law will revert to 15 percent in 2013; lower statutory rates of 25, 28, 33, and 35 percent in the four highest tax brackets, which will revert in 2013 to rates of 28, 31, 36, and 39.6 percent; the expanded 15 percent tax bracket and standard deduction for married couples, which after 2012 will contract to less than twice those for single taxpayers; the reduced top tax rate of 15 percent on long-term capital gains realizations and dividends, which will return to the pre-2003 rates of 20 percent for capital gains and 39.6 percent for dividends; the elimination of the phaseouts of itemized deductions and personal exemptions for higher-income taxpayers, which will be reinstated; the expanded child tax credit, which will revert from \$1,000 per child to \$500; and the American Opportunity Credit for higher education expenses, which will expire after 2012.

Also included in those extensions of lower individual income tax rates and expanded credits and deductions is the temporary “patch” for the alternative minimum tax (AMT), which raised the tax's exemption amounts to prevent incipient increases in the number of taxpayers that the tax affects. The patch was first enacted in 2001 and subsequently extended; the current version of the patch will expire at the end of 2011. As a result, the number of taxpayers affected by the AMT will jump from about 4 million in calendar year 2011 to about 33 million in 2012, CBO projects, and receipts from the AMT will almost quadruple, rising from \$34 billion

1. An exception is made for expiring excise taxes dedicated to trust funds, which are assumed to be extended at their current rates. Although the provisions of the Balanced Budget and Emergency Deficit Control Act that pertain to the baseline expired on September 30, 2006, CBO continues to follow that law's specifications in constructing its baseline.
2. The estimates reported in this box do not include budgetary effects that would result from the influence of those provisions on the broader economy, including effects on the mix of labor compensation—that is, on the division between taxable wages and nontaxable fringe benefits. Such effects are incorporated in CBO's projections of economic activity and thus are included in its baseline revenue projections, but they are not calculated separately and therefore are not included in the estimates reported here. These estimates also do not include the effects that refundable tax credits have on outlays, which are included in CBO's projections of outlays.

3. The scheduled changes in law discussed in this box all occur at the end of calendar years.

Continued

## Box 4-1.

Continued

## Scheduled Changes in the Tax Code That Affect CBO's Revenue Baseline

in fiscal year 2011 to \$129 billion in 2013.<sup>4</sup> CBO anticipates that the additional AMT liability from calendar year 2012 will be paid almost entirely in fiscal year 2013, largely because many taxpayers will be unaware of the change or may be expecting lawmakers to once again raise the AMT's exemption amounts.

*Expiration of the Reduction in Payroll Taxes*—The 2010 tax act provided a one-year temporary reduction in the employee's share of the Social Security payroll tax for 2011. That reduction—from 6.2 percent to 4.2 percent—will expire at the end of the calendar year, boosting revenues as a share of GDP by about 0.6 percentage points thereafter.

*Expiration of the Lower Estate and Gift Tax*—As a result of legislation enacted in 2001, estate tax rates steadily declined and effective exemption amounts increased, culminating in the repeal of the estate tax and a reduction in the gift tax rate in 2010. For 2011 and 2012, the 2010 tax act temporarily set the exemption amount at \$5 million (adjusted for inflation in 2012) and the top rate at 35 percent. However, those changes are themselves slated to expire at the end of 2012, when the rates and the exemption amount for the estate and gift tax revert to those scheduled for 2013 before the 2001 legislation was enacted (a top rate of 55 percent and a \$1 million exemption amount). As a result, in CBO's estimation, estate and gift tax revenues as a share of GDP will increase by 0.2 percentage points by 2014.

*Expiration of Accelerated Depreciation*—For the past several years, provisions in the tax code have allowed businesses to deduct more of the cost of acquiring certain types of fixed investment property (such as machinery) in the year in which those acquisitions occur than would otherwise have been allowed. Most recently, the 2010 tax act allows businesses with large amounts of investment to fully deduct the cost of certain property placed in service in calendar year 2011.<sup>5</sup> In addition, for property placed in service in 2012, the 2010 act allows

such businesses to expense (deduct immediately from taxable income) 50 percent of the property's cost in that year, with the other half of the cost deducted over a period of years. Those provisions initially lower taxable income by allowing firms to accelerate such deductions, but they raise revenues in the future because firms will have fewer deductions remaining. The expiration of those provisions at the end of December 2012 will boost revenues relative to GDP by 0.7 percentage points in 2014, CBO estimates.

*Acceleration of Corporate Income Tax Payments*—Legislated changes that shift the timing of corporate income tax payments will increase revenues as a share of GDP by 0.2 percentage points in 2014, CBO projects. Over the following two years, those changes will lead to a corresponding reduction in revenues.

*Other Scheduled Changes in Tax Provisions*—Numerous other scheduled changes between 2011 and 2014 boost projected revenues relative to GDP by 0.4 percentage points on net by 2014. Among the changes are expiring provisions for income and excise tax credits for ethanol-blended motor fuels, preferential rules for reporting active financing income from international sources, the tax credit for research and experimentation, and the additional standard deduction for sales taxes. Also contributing to the projected increase are provisions in the Patient Protection and Affordable Care Act of 2010 (P.L. 111-148) and the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152) that will take effect over the period; they impose new fees and excise taxes on health insurance providers and on manufacturers and importers of certain medical devices and branded drugs, as well as penalties on employers and uninsured individuals. Those laws also impose an additional Medicare Hospital Insurance tax on higher-earning individuals and an additional tax on net investment income for higher-income taxpayers starting in 2013. Receipts from those changes will be partly offset by the revenue loss from new tax credits, effective beginning in 2014, to subsidize the purchase of health insurance through exchanges.

4. For a more thorough discussion of the expanding scope of the AMT and the types of taxpayers affected (which was produced before the recently enacted two-year extension of AMT relief), see Congressional Budget Office, *The Individual Alternative Minimum Tax*, Issue Brief (January 2010).

5. For more than 50 years, businesses with relatively small amounts of equipment investment have been allowed to fully deduct those costs in the year the property is placed in service.

changes (such as the reductions in the payroll tax and some business tax incentives) expired. But revenues would rise more slowly than in the baseline projections, to nearly 19 percent of GDP by 2021 rather than nearly 21 percent. (See Chapter 1 for a description of the effects on revenues of different policy alternatives for extending expiring tax provisions.)

Other provisions of the tax code have a significant impact on revenue projections. In particular, a variety of exclusions, deductions, and exemptions in both the federal individual and corporate income taxes cause the amount of income subject to taxation to be significantly smaller than the income reported on tax returns. Some of those tax provisions are termed “tax expenditures,” because they are similar in some ways to government spending. In particular, they are similar to entitlement programs, because they are not subject to annual appropriations; they provide financial assistance to particular activities, entities, or groups of people; and any person or entity that meets the requirements can receive the benefits. Those tax expenditures have the effect of reducing tax revenues—for any given level of tax rates—by hundreds of billions of dollars each year. The largest tax expenditures include the exclusion of employers’ contributions for health care, health insurance premiums, and long-term care insurance premiums; the net exclusion of pension contributions and earnings; and deductions for mortgage interest and property taxes on owner-occupied homes.

CBO’s current revenue projections are lower than those the agency published in August 2010—by \$419 billion for 2011, by \$398 billion for 2012, and by a total of \$1.9 trillion (or 5 percent of total revenues) for the 2011–2020 period (see Appendix A). Legislative action, changes in CBO’s economic forecast, and adjustments for technical factors all contributed to those changes. Most of the reduction in the projections for 2011 and 2012 resulted from recently enacted legislation, primarily the 2010 tax act, which led CBO to reduce baseline revenues by an estimated \$409 billion for 2011, \$335 billion for 2012, and \$713 billion for the 2011–2020 period. In addition, for that 10-year period, CBO reduced its projections by about \$960 billion to account for lower projected nominal incomes; those lower incomes in turn stemmed largely from slightly lower projections for both real output and inflation. CBO further reduced its projections by about \$210 billion over the 10 years for various technical reasons—such as changed estimates of the

amount of distributions from tax-deferred retirement accounts—that suggest revenues will be slightly lower for a given level of projected income.

## Sources of Revenues

Federal revenues come from individual income taxes, social insurance taxes, corporate income taxes, excise taxes, estate and gift taxes, remittances of earnings from the Federal Reserve, customs duties, and miscellaneous fees and fines. Individual income taxes are the largest source of federal revenues, accounting for about 45 percent of the total, on average, over the past 40 years. Social insurance revenues, which come from taxes on wages and self-employment income, are the second largest tax source and have accounted for about one-third of revenues since 1971. Receipts from corporate income taxes have made up about a tenth of all revenues during the 1971–2010 period, with other receipts also making up about a tenth of revenues.

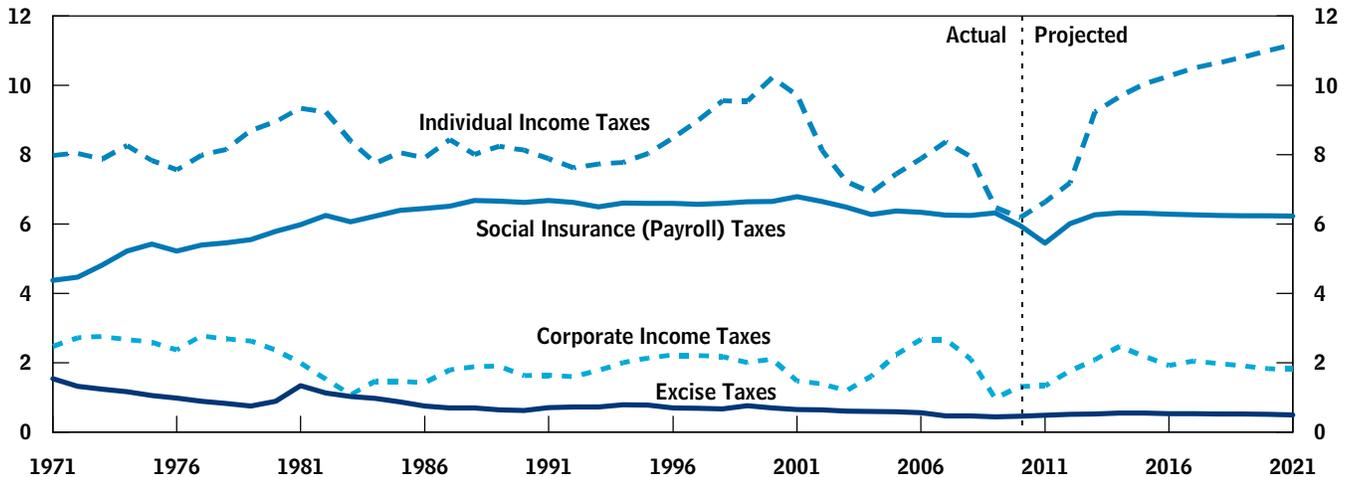
Over the past 40 years, total revenues have averaged about 18 percent of GDP, reaching a high of 20.6 percent in 2000 and a low of 14.9 percent in both 2009 and 2010. The swings in revenues relative to GDP have been concentrated in individual and corporate income taxes. Individual income taxes, which have averaged about 8 percent of GDP since 1971, have been as high as 10.2 percent in 2000 and as low as 6.2 percent in 2010 (see Figure 4-2).

Ups and downs in individual income tax receipts contribute the most to the variation in total revenues over time. That occurs in part because they are the largest source of revenues but also because nonwage income (such as interest, dividends, and capital gains realizations), which makes up a substantial share of the individual income tax base, varies widely over the business cycle and because legislative changes often affect individual income taxes in ways that accentuate short-term swings.

Social insurance taxes are a relatively large but stable source of federal revenues. Over the past 25 years, those receipts have averaged 6.5 percent of GDP, ranging from a peak of 6.8 percent in 2001 to a low of 6.0 percent in 2010. The main tax base—wages and salaries—has been relatively unvarying as a share of GDP when compared with other sources of income, and legislation has not had

**Figure 4-2.****Revenues, by Source, as a Share of Gross Domestic Product**

(Percent)



Source: Congressional Budget Office.

a substantial effect on social insurance taxes over the past few decades. In contrast, largely because of legislated increases in the tax base and rates, social insurance receipts rose steadily relative to GDP between the mid-1960s and the mid-1980s.

Receipts from corporate income taxes, like those from individual income taxes, are quite volatile over the business cycle, and those fluctuations have been especially evident in the past four years: Corporate tax receipts fell from 2.7 percent of GDP in 2007, the largest share in almost 30 years, to 1.0 percent of GDP in 2009, the smallest share since the 1930s. However, because such receipts have averaged only about 2 percent of GDP over the past 40 years, their swings generally have had a much smaller effect on total revenues than the ups and downs in individual income tax receipts.

Revenues from other sources have declined relative to GDP over the 1971–2010 period, primarily because of the steady decline in excise tax revenues relative to GDP. Revenues from other sources have averaged 1.3 percent of GDP over the past 10 years, or about half the share they accounted for in the early 1970s. In general, they have not contributed significantly to swings in revenues.

**Individual Income Taxes**

Individual income taxes account for three-quarters of the increase in total revenues relative to GDP that CBO

projects for the next 10 years. More than half of the expected increase in those receipts relative to the size of the economy stems from currently scheduled changes in tax provisions. The rest of the increase is attributable to the recovery from the recession, structural features of the individual income tax system (such as real bracket creep), and other factors.

**Projected Receipts for 2011 Through 2014**

Receipts of individual income taxes, in the first year-over-year increase since 2007, will grow by 11 percent in 2011, CBO estimates (see Table 4-2). About one-third of the growth projected for that year is explained by rising taxable personal income (as measured in the national income and product accounts). Taxable personal income—which includes wages and salaries, dividends, interest, rental income, and proprietors' income—is a broad indicator of the tax base for individual income taxes; it is projected to grow by 3.7 percent in 2011, in line with the 3.6 percent growth expected in nominal GDP. Wages and salaries, the largest source of taxable personal income, are estimated to rise by 4.2 percent in 2011.

Another third of the projected growth in tax receipts for that year stems from the expiration of the Making Work Pay tax credit at the end of December 2010. The remaining growth is attributable to other factors related to the projected economic recovery and structural features of

**Table 4-2.****CBO's Projections of Individual Income Tax Receipts and Taxable Personal Income**

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016 <sup>a</sup>	2012-2021 <sup>a</sup>
Receipts from Individual Income Taxes														
In billions of dollars	899	998	1,128	1,516	1,671	1,829	1,967	2,105	2,231	2,365	2,509	2,662	8,110	19,983
As a percentage of GDP	6.2	6.6	7.2	9.2	9.7	10.1	10.3	10.5	10.7	10.8	11.0	11.2	9.4	10.2
Annual growth rate (Percent)	-1.8	11.0	13.1	34.3	10.3	9.4	7.5	7.0	6.0	6.0	6.1	6.1	14.5	10.3
Taxable Personal Income <sup>b</sup>														
In billions of dollars	9,590	9,940	10,410	10,888	11,493	12,141	12,821	13,477	14,132	14,789	15,442	16,129	57,752	131,721
As a percentage of GDP	66.1	66.1	66.3	66.4	66.6	66.7	67.0	67.3	67.5	67.7	67.7	67.7	66.6	67.2
Annual growth rate (Percent)	0	3.7	4.7	4.6	5.6	5.6	5.6	5.1	4.9	4.6	4.4	4.5	5.2	5.0
Individual Receipts as a Percentage of Taxable Personal Income <sup>b</sup>														
	9.4	10.0	10.8	13.9	14.5	15.1	15.3	15.6	15.8	16.0	16.3	16.5	14.0	15.2

Source: Congressional Budget Office.

- Measures expressed in billions of dollars are the cumulative amounts over the period. Measures expressed as a percentage of gross domestic product (GDP) or taxable personal income are averages over the period. Measures expressed as annual growth rates are the average rates compounded annually over the period.
- Taxable personal income reflects income as measured in the national income and product accounts maintained by the Department of Commerce's Bureau of Economic Analysis and not income as reported on tax returns. It comprises wages and salaries, dividends, interest, rental income, and proprietors' income but excludes capital gains realizations.

the individual tax system that cause receipts to grow faster than incomes over time.

CBO expects individual income tax receipts to grow rapidly from 2012 through 2014—by 13 percent in 2012, by 34 percent in 2013, and by 10 percent in 2014—boosting revenues from 6.6 percent of GDP this year to 9.7 percent of GDP in 2014, if current laws remain unchanged. The most important reason for that growth, accounting for about two-thirds of the increase relative to GDP (2.0 percentage points), is the expiration of provisions originally enacted on a temporary basis over the past decade and then extended through 2011 or 2012 by the 2010 tax act (see Box 4-1 on page 88). The remaining one-third (1.1 percentage points) of the revenue growth relative to GDP can be ascribed to changes in capital gains realizations, some of which result from the scheduled changes in tax laws and some of which occur for reasons related to the economic recovery, and to certain other factors, such as real bracket creep and rising wages and salaries.

**Capital Gains Realizations.** Tax rates on realizations of capital gains are scheduled to rise in 2013 for two reasons: The lower rates recently extended in the 2010 tax

act expire, and the additional tax of 3.8 percent on certain unearned income that was enacted in the Health Care and Education Reconciliation Act of 2010 takes effect.<sup>2</sup> CBO projects that even though the higher tax rates will reduce capital gains realizations in 2013 and beyond, overall income tax revenues from capital gains will increase; on net, the higher tax rates will boost receipts relative to GDP by an estimated 0.1 percentage point by 2015.<sup>3</sup> Because taxpayers tend to realize fewer gains when tax rates are higher, those higher rates will reduce the long-run average amount of realizations relative to the size of the economy. However, higher tax rates also increase the amount of revenue collected on a given

- When the additional tax on unearned income begins in 2013, capital gains realizations will be the largest component of unearned income subject to that tax.
- Although the higher rates go into effect in 2013, CBO expects some taxpayers to avoid them by accelerating their realizations of gains and shifting them into 2012—that is, by selling assets that would generate taxable capital gains in that year, before the rates go up, rather than waiting until 2013. That acceleration would largely offset any revenue gains in 2014, because most of the taxable gains that would have been realized in 2013 would have resulted in tax payments in 2014.

**Table 4-3.****Actual and Projected Capital Gains Realizations and Tax Receipts**

	Capital Gains Realizations <sup>a</sup>		Capital Gains Tax Receipts <sup>b</sup>	
	In Billions of Dollars	As a Percentage of GDP	In Billions of Dollars	As a Percentage of Individual Income Tax Receipts
2007	924	6.6	126	10.9
2008	498	3.5	106	9.2
2009	285	2.0	54	5.9
2010	321	2.2	38	4.3
2011	429	2.8	48	4.8
2012	691	4.4	68	6.0
2013	451	2.7	106	7.0
2014	622	3.6	103	6.1
2015	659	3.6	134	7.3
2016	694	3.6	141	7.2
2017	728	3.6	149	7.1
2018	763	3.6	156	7.0
2019	798	3.6	164	6.9
2020	835	3.6	171	6.8
2021	872	3.6	179	6.7

Source: Congressional Budget Office.

Note: Data on realizations after 2008 and on tax receipts in all years are estimated or projected by CBO. Data on realizations for 2007 and 2008 are estimated by the Department of the Treasury.

- a. The sum of net capital gains from tax returns that reported a net gain, figured on a calendar year basis. (A capital gain is typically the increase in the value of an asset between the time it is purchased and sold—thus, the difference between the sale price and the cost of acquiring the asset.)
- b. Figured on a fiscal year basis.

amount of realizations. For the increase in rates scheduled for 2013, the former effect only partially offsets the latter, so the net effect will be to increase revenues from that source despite a somewhat smaller amount of realizations.

Aside from the effects of the scheduled changes in tax rates, other sources of growth in capital gains realizations will boost revenues relative to GDP by 0.3 percentage points through 2014, CBO projects. Capital gains realizations fell by an estimated 46 percent and by an additional 43 percent in calendar years 2008 and 2009, respectively, reflecting the recent economic turmoil and steep declines in the stock and housing markets (see Table 4-3). But the strengthening recovery and an associated increase in asset prices are expected to cause capital gains realizations to rebound between 2010 and 2014. By 2014, realizations are projected to be near the long-term historical average relationship to GDP that would be consistent with the tax rate on gains in effect in that year. In CBO's projections, that ratio stays roughly the same—at about 3.6 percent of GDP—through 2021.

**Other Factors.** CBO anticipates that other factors will also cause individual income tax receipts to rise as a share of GDP by 0.7 percentage points over the 2012–2014 period. Real bracket creep, in which the growth of inflation-adjusted incomes causes more income to be taxed in higher tax brackets, will produce a 0.3 percentage point increase relative to GDP, CBO estimates. (That increase occurs because income tax brackets are indexed for price inflation but not for income growth in excess of inflation.) In addition, the unexplained portion of the recent weakness in receipts that extends beyond what can be explained by current economic data will gradually dissipate over the next several years, CBO assumes, causing projected individual income tax revenues to grow relative to the size of the economy by 0.2 percentage points between 2011 and 2014. The growth of personal income (especially wages and salaries) relative to GDP, an expected increase in taxable pension distributions as the population ages, and other factors will account for the remaining 0.2 percentage points of the projected increase in receipts relative to GDP from 2012 to 2014.

### Projected Receipts Beyond 2014

In CBO's baseline projections, revenues from personal income taxes rise as a share of GDP (and as a share of taxable personal income) between 2014 and 2021, reaching 11.2 percent of GDP by 2021—1.5 percentage points higher than CBO's projection for 2014 and 4.5 percentage points higher than its estimate for 2011. Several factors contribute to that increase.

Certain features of the individual income tax, for example, will cause average tax rates (taxes as a percentage of income) to rise after 2014, thereby increasing the receipts generated by a given amount of economic activity. CBO projects that real bracket creep will result in an increase in revenues relative to GDP of 0.6 percentage points between 2014 and 2021 (in addition to an increase of about 0.3 percentage points between 2011 and 2014). CBO also expects that the individual AMT, because it is not indexed for inflation, will claim a growing share of rising nominal incomes, boosting revenues relative to GDP by 0.3 percentage points between 2014 and 2021.

The aging of the population and the resulting increase in the number of retirees will also, by CBO's estimates, contribute to the rise in individual income tax receipts as a share of GDP between 2014 and 2021. CBO expects taxable distributions from certain tax-deferred retirement accounts, such as traditional individual retirement accounts and 401(k) plans, to increase faster than overall economic activity, raising individual income tax receipts relative to GDP by 0.2 percentage points over the 2014–2021 period. Contributions to those accounts were exempt from taxation when they were made initially, as was income earned on the assets in the accounts, thus reducing the amount of taxable income reported to the Internal Revenue Service in earlier years; as retirees take distributions from those accounts, the money becomes taxable. That tax treatment is one of the largest tax expenditures, which are defined in the Congressional Budget and Impoundment Control Act of 1974 as exclusions, exemptions, or deductions from gross income or special credits, preferential rates of tax, or deferrals of tax liability (see Box 4-2).

Other factors, taken together, account for the remaining 0.4 percentage points of the increase in individual income tax receipts as a share of the economy. One important factor is the projected growth of personal income (especially wages and salaries) relative to GDP. A much smaller fac-

tor tending to lower revenues relative to GDP is the tax credits that will be available to subsidize the purchase of health insurance policies through exchanges by individuals and families whose income is below certain amounts. Those credits are projected to reduce revenues by about 0.1 percent of GDP in 2021 but only by about one-quarter of that amount in 2014.<sup>4</sup>

### Social Insurance Taxes

CBO projects that receipts from social insurance taxes will dip temporarily in 2011 and 2012, return in 2013 to the 6.3 percent of GDP they measured for several years before 2010, and remain at about the same level thereafter (see Table 4-4). Relative to wages and salaries—the most important part of the social insurance tax base—social insurance taxes will decline to 12.4 percent in 2011, by CBO's estimates, but then increase to 14.1 percent in 2013 before edging down to 13.8 percent by 2021.

### Sources of Social Insurance Receipts

Payroll taxes for the Social Security program (Old-Age, Survivors, and Disability Insurance, or OASDI) and Medicare's Hospital Insurance (HI) program are the largest source of social insurance tax revenues. A small share of such revenues comes from unemployment insurance payroll taxes and from contributions to other federal retirement programs (see Table 4-5 on page 98). The premiums for Medicare Part B (the Supplementary Medical Insurance program) and Part D (the prescription drug program) do not appear as revenues in the budget; rather, they are considered offsets to spending—because participation in those programs is voluntary—and appear as offsetting receipts on the spending side of the budget.

Social Security and Medicare payroll taxes are calculated as a percentage of earnings. The Social Security tax is usually 12.4 percent of earnings, with the employer and employee each paying half; it applies only up to a taxable

4. The premium assistance credit, which is refundable, was created by the health care legislation enacted in 2010 and is scheduled to take effect in 2014. A refundable credit reduces a taxpayer's overall tax liability; if the credit exceeds that liability, the excess may be refunded to the taxpayer, in which case it is recorded as an outlay in the budget. The premium assistance credits will affect the outlay side of the budget much more than the revenue side. (See Chapter 3 for a discussion of how the credits affect outlays.)

**Table 4-4.****CBO's Projections of Social Insurance Tax Receipts and Wages and Salaries**

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016 <sup>a</sup>	2012-2021 <sup>a</sup>
Receipts from Social Insurance Taxes														
In billions of dollars	865	819	943	1,029	1,092	1,148	1,204	1,256	1,309	1,364	1,424	1,484	5,416	12,253
As a percentage of GDP	6.0	5.4	6.0	6.3	6.3	6.3	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.2
Annual growth rate (Percent)	-2.9	-5.3	15.2	9.0	6.1	5.2	4.9	4.3	4.2	4.2	4.3	4.2	8.0	6.1
Wages and Salaries <sup>b</sup>														
In billions of dollars	6,351	6,618	6,957	7,307	7,724	8,166	8,608	9,009	9,430	9,874	10,306	10,752	38,763	88,135
As a percentage of GDP	43.8	44.0	44.3	44.6	44.8	44.9	45.0	45.0	45.0	45.2	45.2	45.2	44.7	44.9
Annual growth rate (Percent)	0.4	4.2	5.1	5.0	5.7	5.7	5.4	4.7	4.7	4.7	4.4	4.3	5.4	5.0
Social Insurance Tax Receipts as a Percentage of Wages and Salaries <sup>b</sup>														
	13.6	12.4	13.6	14.1	14.1	14.1	14.0	13.9	13.9	13.8	13.8	13.8	14.0	13.9

Source: Congressional Budget Office.

- a. Measures expressed in billions of dollars are the cumulative amounts over the period. Measures expressed as a percentage of gross domestic product (GDP) or wages and salaries are averages over the period. Measures expressed as annual growth rates are the average rates compounded annually over the period.
- b. Wages and salaries reflect income as measured in the national income and product accounts maintained by the Department of Commerce's Bureau of Economic Analysis and not income as reported on tax returns.

maximum amount (currently \$106,800) that is indexed to the growth of average earnings over time. For calendar-year 2011, the 2010 tax act reduced the OASDI tax rate on employees by 2.0 percentage points, to 4.2 percent.

The Medicare HI tax applies to all earnings and is levied at a rate of 2.9 percent, with the employer and employee each paying half. Starting in 2013, an additional tax of 0.9 percent will be levied on earnings above \$200,000 for individuals and \$250,000 for married couples filing a joint income tax return, bringing their total Medicare tax to 3.8 percent.

In 2011, the Social Security and Medicare tax rate for employees and employers combined will be 13.3 percent. Under current law, the combined rate will return to 15.3 percent in calendar year 2012 and will rise the next year, for some taxpayers, to 16.2 percent.

### Projected Receipts

Social insurance receipts in CBO's baseline fall from 6.0 percent of GDP in 2010 to 5.4 percent in 2011. The

decline stems from the reduction in the employee's share of the payroll tax rate for calendar year 2011, which reduces projected revenues by about \$85 billion in fiscal year 2011 (and by an additional \$30 billion in 2012).

Social insurance receipts in total will fall by \$46 billion in 2011, CBO estimates; that projected drop is smaller than the decline resulting from the lower payroll tax rate, in large part because wages and salaries are expected to grow in 2011.

Under current law, CBO expects social insurance receipts to rise relative to GDP in both 2012 and 2013, returning to about 6.3 percent of GDP, the same percentage recorded each year from 2006 to 2009. Several factors account for the increase:

- The reduction in the tax rate for calendar year 2011 will affect only one-quarter of fiscal year 2012 and by fiscal year 2013 will no longer be reducing payroll tax receipts;

**Box 4-2.****Tax Expenditures**

A variety of exclusions, deductions, and exemptions in both the federal individual and corporate income taxes cause the individual and corporate income tax bases—the amount of income subject to taxation—to be significantly smaller than the income reported on tax returns. For example, the most comprehensive measure of income reported on individual income tax returns is gross income—and even that measure omits certain types of personal income that taxpayers are allowed to exclude from reporting. Gross income totaled \$8.4 trillion in 2008, but once the allowable deductions and exemptions were subtracted, total income subject to tax (taxable income) was \$5.7 trillion—or 67 percent of gross income. In addition to the exclusions, deductions, and exemptions, both the individual and the corporate income tax allow for tax credits that reduce the final tax paid by families and businesses. All else being equal, those provisions of tax law reduce tax receipts by hundreds of billions of dollars each year; as a result, tax rates must be higher to collect the same amount of revenues that would be collected in the absence of those provisions.

Income tax exclusions, deductions, exemptions, and credits generally fall into three broad categories: those that modify taxable income to exclude the costs of earning that income, such as an employee's deduction for work-related expenses; those that subsidize or promote certain uses of income that are deemed worthy, such as the deduction for charitable contributions; and those that provide tax relief on the basis of certain income or demographic characteristics, such as the earned income tax credit for lower-income working families and the child tax credit for families with children.

Some of those tax provisions are termed “tax expenditures” because they are similar in some ways to government spending. Like spending programs, tax expenditures provide financial assistance to particular activities, entities, or groups of people. They are more similar to entitlement programs than to discretionary spending because they are not subject to annual appropriations and any person or entity that meets the requirements can receive the benefits.

The Congressional Budget and Impoundment Control Act of 1974 defines tax expenditures as “those revenue losses attributable to provisions of the Federal tax laws

which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.”<sup>1</sup> The Congressional Budget Act requires that a list of tax expenditures be included in the budget, and each year the Administration publishes estimates of those expenditures (prepared by the Treasury's Office of Tax Analysis) for provisions that affect federal individual and corporate income taxes. The Joint Committee on Taxation (JCT) also publishes estimates of individual and corporate income tax expenditures each year. Neither the Treasury nor JCT publishes estimates of tax expenditures for social insurance (payroll) taxes or other federal taxes.

According to estimates by the JCT staff, the largest tax expenditure is the exclusion of employers' contributions for health care, health insurance premiums, and long-term care insurance premiums (see the figure to the right).<sup>2</sup> Although such contributions are part of employees' total compensation (and are deductible by firms as an expense in calculating their corporate income tax liability), they are exempt from individual income and payroll taxes and are thus excluded from employees' taxable income. The forgone income tax revenues from this tax expenditure are projected to total \$659 billion in 2010 through 2014; forgone revenues from payroll taxes will be significant during that period as well. (Health care also receives favorable tax treatment in other ways: Medicare benefits are excluded from taxable income, and taxpayers' medical and long-term care expenses that exceed a threshold amount may be deducted.)

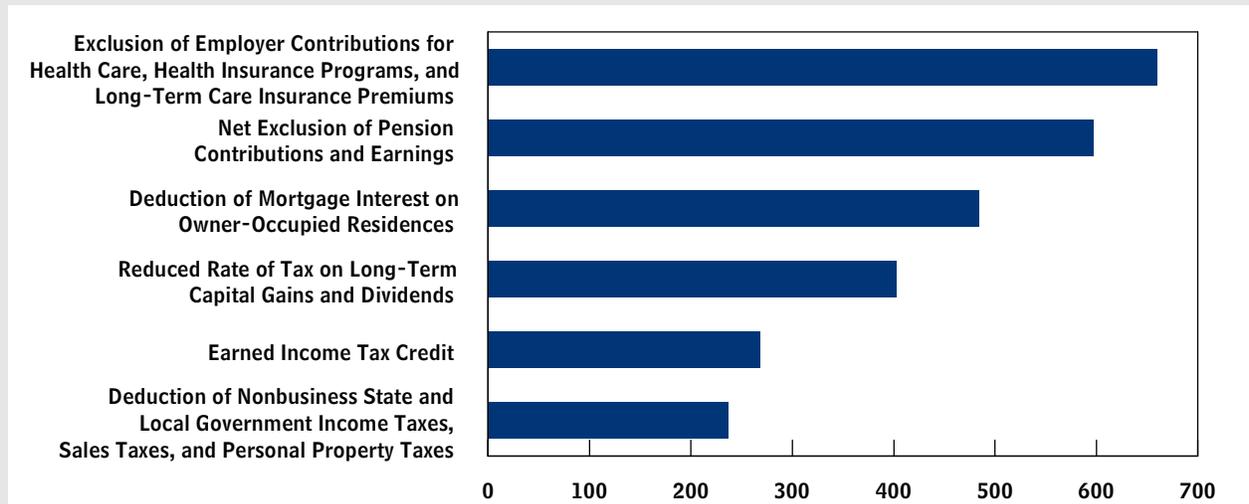
The second largest tax expenditure is the net exclusion of pension contributions and earnings, which are estimated to total about \$597 billion from 2010 through 2014. Most contributions to pension and retirement plans are not included in employees' taxable income, nor is the return on the assets accumulated in those

1. Section 3(3) of the Congressional Budget and Impoundment Control Act of 1974, 2 U.S.C. 622(3), 88 Stat. 297.
2. Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2010–2014*, JCS-3-10 (December 15, 2010). The estimates were produced before enactment of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312).

## Box 4-2.

Continued

## Tax Expenditures

Cumulative Budgetary Effect of Major Income Tax Expenditures,  
2010 to 2014 (Billions of dollars)

Source: Joint Committee on Taxation.

plans. Rather, most pension benefits and withdrawals from retirement accounts are taxable when the benefits are paid or the money is withdrawn.

Although typically considered a tax expenditure, the net exclusion of pension contributions and earnings raises the issue of the appropriate base against which to measure the exclusion. A comprehensive income tax base would include income when it was earned; thus, it would comprise income contributed to a pension or retirement plan as well as income from returns on assets in the plan or retirement account. However, an alternative base might not depend on income but instead depend on income minus savings, or consumption. Measured against that kind of base, the exclusion for pension contributions and earnings, a form of saving, would not be considered a tax expenditure.

The largest tax expenditures in the housing area come from the most widely used deductions: those for mortgage interest and property taxes on owner-occupied homes. Homeowners may deduct interest on their mortgages (up to \$1.1 million in total) and property taxes from their income when they compute their tax liability. Over the five years from 2010 through 2014, the forgone revenues from the mortgage interest and property tax deductions are projected to total about \$484 billion and \$121 billion, respectively.

Homeowners may also exclude from taxation as much as \$250,000 (or \$500,000 for a joint return) of any capital gain they realize when they sell their primary residence. The revenues forgone are estimated to be about \$86 billion from 2010 through 2014.

Corporate tax expenditures reduce revenues by much less than do individual tax expenditures. The largest corporate tax expenditure—estimated to total about \$71 billion over the 2010–2014 period—is for the deferral of taxes on the active income of controlled foreign corporations (that is, income earned by a foreign subsidiary of a U.S. multinational corporation). Although the federal government taxes the worldwide income of U.S. businesses, that active foreign income is not subject to tax until it is remitted to the parent corporation as dividends.

The second largest corporate tax expenditure is the deduction for domestic production activities, which is projected to result in \$43 billion in forgone corporate tax revenues from 2010 through 2014 (and an additional \$19 billion in individual income tax revenues). U.S. businesses that are engaged in certain types of domestic production, such as manufacturing and other specified activities, may deduct from their taxable income a percentage of the income they earn from those activities.

**Table 4-5.****CBO's Projections of Social Insurance Tax Receipts, by Source**

(Billions of dollars)

	Actual,											Total		
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Social Security	632	566	668	732	769	811	855	897	938	981	1,025	1,069	3,835	8,745
Medicare	180	189	203	217	232	246	260	273	287	301	315	330	1,158	2,664
Unemployment Insurance	45	56	65	71	83	83	81	78	75	74	75	76	384	762
Railroad Retirement	4	4	4	5	5	5	5	5	5	5	6	6	24	51
Other Retirement	4	4	3	3	3	3	3	3	3	3	3	3	16	31
<b>Total</b>	<b>865</b>	<b>819</b>	<b>943</b>	<b>1,029</b>	<b>1,092</b>	<b>1,148</b>	<b>1,204</b>	<b>1,256</b>	<b>1,309</b>	<b>1,364</b>	<b>1,424</b>	<b>1,484</b>	<b>5,416</b>	<b>12,253</b>

Source: Congressional Budget Office.

- A downward adjustment was made to the amount of revenues from payroll taxes recorded in 2010 to correct overestimates of such receipts in prior years; CBO expects a similar correction in 2011 but not in 2012 and 2013;<sup>5</sup>
- Wages and salaries as a share of GDP are projected to rise from their 2011 level; and
- The additional HI tax of 0.9 percent is scheduled to take effect in 2013.

Between 2014 and 2021, social insurance receipts are projected to remain between 6.2 percent and 6.3 percent of GDP, a stability reflecting two roughly offsetting effects: slight increases in wages and salaries relative to GDP, which will boost receipts, and increases in the projected share of earnings above the taxable maximum amount, which will reduce the share of wages subject to taxation. In addition, receipts from unemployment

insurance taxes—most of which are imposed by states but which yield amounts that are considered to be federal revenues—are expected to grow through 2014, as states raise taxes to replenish their recession-depleted unemployment trust funds. In CBO's estimation, however, those revenues will peak relative to GDP in 2014 and taper off slightly thereafter.

### Corporate Income Taxes

As a result of the beginning of the economic recovery, corporate profits in 2010 rebounded strongly from recessionary lows, rising by nearly 50 percent and reaching 8.1 percent of GDP. Receipts from corporate income taxes grew by nearly 40 percent as a result, rising to 1.3 percent of GDP in 2010 from a nearly 75-year low of 1.0 percent in 2009. Nevertheless, that 1.3 percent share was much smaller than the average share of 2.0 percent of GDP over the 1971–2010 period.

Over the next 10 years, receipts from corporate income taxes will account for about 0.5 percentage points of the 6 percentage-point increase that CBO projects in total revenues relative to GDP. Between 2011 and 2014, corporate tax receipts in CBO's baseline more than double, rising from 1.3 percent of GDP to 2.5 percent of GDP. That increase is spurred largely by legislative actions that have reduced corporate receipts recently but will boost them in the next few years or that will speed up tax payments and cause a temporary increase in receipts in 2014. During the remainder of the 10-year projection period, projected declines in corporate profits relative to the size of the economy, along with the consequences of the

5. Employers and individuals combine social insurance and individual income taxes when they make payments throughout the year but then months later report the breakdown for the two sources to the Treasury. Thus, the Treasury initially estimates the distribution—how much of the receipts constitutes individual income taxes and how much constitutes payroll taxes—and corrects it later. CBO's baseline projection includes an expected adjustment of \$17 billion in fiscal year 2011 to correct an overstatement of prior years' social insurance receipts. However, because that adjustment by the Treasury results in a corresponding increase in individual income taxes, it has no effect on total revenues. Also, that adjustment will not contribute to a significant decline in social insurance revenues relative to the amount in 2010 because a similar adjustment was made in that year.

**Table 4-6.****CBO's Projections of Corporate Income Tax Receipts and Domestic Economic Profits**

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016 <sup>a</sup>	2012-2021 <sup>a</sup>
Receipts from Corporate Income Taxes														
In billions of dollars	191	201	279	343	428	398	370	413	417	420	420	437	1,817	3,923
As a percentage of GDP	1.3	1.3	1.8	2.1	2.5	2.2	1.9	2.1	2.0	1.9	1.8	1.8	2.1	2.0
Annual growth rate (Percent)	38.5	4.9	38.7	23.1	24.9	-7.1	-7.0	11.6	1.0	0.7	0.1	4.0	13.0	8.1
Domestic Economic Profits <sup>b</sup>														
In billions of dollars	1,183	1,294	1,346	1,405	1,429	1,456	1,508	1,518	1,538	1,547	1,589	1,644	7,144	14,981
As a percentage of GDP	8.1	8.6	8.6	8.6	8.3	8.0	7.9	7.6	7.3	7.1	7.0	6.9	8.2	7.6
Annual growth rate (Percent)	47.7	9.4	4.0	4.4	1.7	1.9	3.6	0.7	1.3	0.5	2.8	3.5	3.1	2.4
Corporate Receipts as a Percentage of Domestic Economic Profits <sup>b</sup>	16.2	15.5	20.7	24.4	30.0	27.3	24.5	27.2	27.1	27.1	26.4	26.6	25.4	26.2
Corporate Income Tax Receipts Without Legislated Shifts in the Timing of Payments														
In billions of dollars	191	201	279	343	386	402	408	413	417	415	424	437	1,817	3,923
As a percentage of GDP	1.3	1.3	1.8	2.1	2.2	2.2	2.1	2.1	2.0	1.9	1.9	1.8	2.1	2.0
Annual growth rate (Percent)	38.5	4.9	38.7	23.1	12.6	4.1	1.5	1.2	1.0	-0.4	2.2	2.9	15.2	8.1
As a percentage of domestic economic profits <sup>b</sup>	16.2	15.5	20.7	24.4	27.0	27.6	27.0	27.2	27.1	26.8	26.7	26.6	25.4	26.2

Source: Congressional Budget Office.

- Measures expressed in billions of dollars are the cumulative amounts over the period. Measures expressed as a percentage of gross domestic product (GDP) or domestic economic profits are averages over the period. Measures expressed as annual growth rates are the average rates compounded annually over the period.
- Domestic economic profits (defined as economic profits minus profits earned by transnational corporations) reflect profits as measured in the national income and product accounts maintained by the Department of Commerce's Bureau of Economic Analysis and not profits as reported on tax returns.

accelerated payments in 2014, reduce corporate receipts in the baseline to 1.8 percent of GDP by 2021.

**Projected Receipts for 2011 Through 2014**

Corporate receipts, CBO anticipates, will remain at 1.3 percent of GDP in 2011. Domestic economic profits will rise by about 9 percent in 2011, climbing for the second year in a row, and will reach 8.6 percent of GDP.<sup>6</sup> However, a slight downtick anticipated in the average tax rate on those profits will keep receipts from rising relative to GDP (see Table 4-6). Tax collections in recent months have not grown quite as quickly as CBO had expected, given the increases in profits. The relatively low average tax rate will continue through 2011, in CBO's estimation, but the precise reasons for the lower rate will not be known until data from corporate income tax returns for 2010 become available, probably in 2012.

Over the past two years, a number of changes to the tax code have reduced corporate taxes, lowering the average rate on domestic economic profits. The most significant changes involve the speed at which firms may deduct the costs of acquiring equipment from their taxable income. From 2008 through 2010, firms with large amounts of

- Corporate domestic economic profits are profits from the current production activities of domestic and foreign corporations carried out within the United States. Such profits are calculated by removing inventory profits and losses and using economic depreciation, which generally spreads out the depreciation deductions (for the declines in the value of firms' fixed assets) over a longer period than is allowed for tax purposes. Corporate domestic economic profits exclude certain income of U.S.-based multinational corporations that is derived from foreign sources, most of which does not generate corporate income tax receipts in the United States.

investment could expense (immediately deduct from their taxable income) 50 percent of their investment in equipment.<sup>7</sup> The 2010 tax act went a step further, allowing such firms to immediately deduct 100 percent of the costs of those investments made between September 8, 2010, and December 31, 2011; for equipment acquired between January 1, 2012, and December 31, 2012, they will be permitted to immediately deduct 50 percent of the cost. After 2012, current tax law includes a return to the typical rules that generally allow no expensing and thus require firms to deduct all of their equipment investment over a number of years.

The combination of those tax provisions reduced receipts as a share of GDP by about 0.5 percentage points in 2009 and in 2010, with a similar effect expected in 2011. As a result, CBO projects that those provisions will contribute little to year-to-year changes in receipts relative to GDP in 2010 and 2011. In future years, however, they will have substantial effects on the outlook for receipts, as their anticipated effects first wane and then reverse, boosting receipts in later years.

According to CBO's projections, domestic economic profits will be relatively stable as a percentage of GDP over the 2012–2014 period, but the average tax rate on those profits will rise sharply and cause corporate income tax receipts to climb to 2.5 percent of GDP. The average tax rate will increase by several percentage points in 2012 and then by several points more in 2013 and 2014, by CBO's estimates. Most of that increase in the average rate stems from scheduled changes in the rules governing the expensing of investment in equipment: Taxes in 2011 and 2012 will have been lowered by the accelerated deductions that businesses shifted into those years, but in 2012, firms will not be able to deduct any of the cost of the equipment investment that they fully expensed in 2011, and they will be able to deduct only half the cost of equipment investment from earlier years in which they benefited from 50 percent expensing. As a result, their depreciation deductions will be lower, and hence their taxable income and tax payments higher, than they would have been had the accelerated depreciation provisions of recent years not been enacted. Taxes will be boosted after

2012 because firms will already have deducted some or all of the costs of investment made in 2011 and 2012.<sup>8</sup>

Two other factors explain a portion of the increase in corporate receipts that CBO projects for the next three years. First, according to CBO's calculations, provisions in seven different laws will lead to a shift of \$42 billion in corporate estimated tax payments from 2015 and 2016 to 2014; CBO projects that without that legislation in place, corporate income tax receipts would have risen from 1.3 percent of GDP in 2011 to 2.2 percent in 2014 (instead of the baseline projection of 2.5 percent for 2014). Second, CBO anticipates that the recent weakness in collections that is not explained by available data on corporate profits or by other measures used in forecasting receipts will gradually diminish between 2011 and 2015, raising the average tax rate on profits.

#### Projected Receipts Beyond 2014

Corporate income tax receipts in CBO's baseline projections fall from 2.5 percent of GDP in 2014 to 1.8 percent of GDP in 2021. That decline occurs because domestic economic profits as a share of economic activity are projected to drop from 8.3 percent of GDP in 2014 to 6.9 percent in 2021, mostly the result of rising interest payments on businesses' debt and rising depreciation on investments in structures and equipment. The statutory shifts in the timing of corporate tax payments that will temporarily boost projected receipts in 2014 will cause them to decline in 2015 and 2016 and have no effect beyond then.

#### Other Sources of Revenues

In addition to individual income, social insurance, and corporate income taxes, the other sources of federal revenues are excise taxes, estate and gift taxes, earnings of the Federal Reserve System, customs duties, and other, miscellaneous levies. CBO projects that revenues from those sources will total \$211 billion in 2011 (see Table 4-7). As a share of GDP, those revenues will total 1.4 percent in 2011, according to CBO's estimates, and will increase to 1.6 percent of GDP in 2021. Among this group of revenue sources, declines in receipts from the Federal Reserve over the next three years, CBO estimates, will be more

7. For more than 50 years, firms with relatively small amounts of investment have been allowed a more advantageous treatment, namely the ability to fully deduct those costs in the year the property was placed in service.

8. To a lesser extent, the same effect occurs as a result of the 50 percent expensing allowed for 2008 through most of 2010. However, many of the accelerated deductions taken in those years were shifted from years before 2013.

**Table 4-7.****CBO's Projections of Other Sources of Revenues**

(Billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012-2016	2012-2021
Excise Taxes														
Highways	29	29	34	36	37	38	38	38	39	39	39	39	183	377
Tobacco	18	17	17	17	17	16	16	16	16	15	15	15	83	160
Aviation	11	11	12	12	13	14	15	16	16	17	18	19	66	152
Alcohol	9	9	9	10	10	10	10	10	11	11	11	11	49	103
Health insurers	0	0	0	0	7	10	10	12	12	13	13	13	27	91
All other	*	7	8	11	12	12	13	14	16	18	20	22	55	145
Subtotal	67	73	80	86	95	100	102	106	110	113	116	120	463	1,028
Estate and Gift Taxes	19	11	12	14	42	48	53	57	61	65	69	73	168	492
Federal Reserve	76	80	63	51	39	36	37	33	38	44	50	54	225	445
Customs Duties	25	29	31	33	36	40	44	49	52	56	60	64	185	467
Other Miscellaneous Receipts														
Universal Service Fund	9	9	9	9	9	9	10	10	10	10	11	11	47	99
Other fees and fines	11	9	10	10	30	42	45	45	47	52	54	58	137	394
Subtotal	20	18	19	20	39	51	55	55	57	62	64	69	184	493
<b>Total</b>	<b>207</b>	<b>211</b>	<b>205</b>	<b>203</b>	<b>251</b>	<b>276</b>	<b>292</b>	<b>301</b>	<b>318</b>	<b>340</b>	<b>359</b>	<b>380</b>	<b>1,227</b>	<b>2,925</b>

Source: Congressional Budget Office.

Note: \* = between zero and \$500 million.

than offset starting in 2014 by increased receipts from the other sources.

**Excise Taxes**

After falling for much of the past decade, receipts from excise taxes over the next five years are expected to post slight gains as a share of GDP, rising from 0.5 percent in 2010 to 0.6 percent in 2015. The new excise taxes established by the 2010 health care legislation and the expiration of several tax credits are responsible for the increase during those years. From 2016 through 2021, excise taxes are expected to slowly decline as a share of GDP. Most excise taxes—those generating more than 80 percent of total excise tax revenues—are levied per unit of a good or per transaction rather than as a percentage of value. Thus, most excise receipts grow with real economic activity, but they do not rise with inflation and therefore are not projected to grow as fast as nominal GDP during the last six years of the projection period. More than 85 percent of excise taxes fall into five major categories: highways,

tobacco, aviation, alcohol, and health insurers (see Table 4-7).

**Highways.** More than one-third of all excise receipts come from taxes dedicated to the Highway Trust Fund—primarily taxes on gasoline and diesel fuel, including blends of those fuels with ethanol. CBO projects that overall consumption of motor fuel—gasoline, ethanol, and diesel—will be relatively stable in 2011 but that receipts from highway taxes will decrease by 1 percent, which would mark the sixth consecutive year of declining revenues from that source. The drop in receipts stems mostly from a shift in motor fuel use: Ethanol-blended fuels, which as a result of available tax credits have for many years faced lower effective tax rates relative to those for pure gasoline, now account for a larger share of fuel use. After the drop in 2011, receipts from highway taxes will then increase by an average annual rate of more than 10 percent in 2012 and 2013, CBO estimates, before settling into average annual growth of about 1 percent for the remainder of the projection period. The substantial

increases CBO projects for 2012 and 2013 result for the most part from the scheduled expiration in 2011 of the tax credits for ethanol-blended fuels, which is expected to generate about \$6 billion in additional revenues in fiscal year 2013, the first full year after the credits expire.

Under current law, most of the highway taxes are scheduled to expire on September 30 of this year, but as specified in the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline incorporates the assumption that expiring excise taxes dedicated to trust funds are extended.<sup>9</sup> However, that assumption of extensions does not apply to the expiring tax credits for ethanol-blended fuels, because those credits affect general revenues rather than revenues dedicated to the Highway Trust Fund. As a result, CBO's baseline projections beyond 2011 reflect the full tax rates on all motor fuels and do not incorporate lower effective rates on ethanol-blended fuels.

**Tobacco.** Receipts from tobacco taxes are projected to decrease by just under \$300 million (or 2 percent) in 2011 after posting substantial increases in 2009 and 2010. The upswings in those years stemmed from the higher tax rates on tobacco products enacted in the Children's Health Insurance Program Reauthorization Act of 2009; those changes represented a 62-cent-per-pack increase in the excise tax on cigarettes (which now stands at \$1.01 per pack).<sup>10</sup> Tobacco revenues are projected to fall by between 1 percent and 2 percent in 2012 and at similar rates in future years, which is consistent with the long-term historical decline in tobacco consumption.

**Aviation.** Receipts from aviation taxes increased by 3 percent in 2010, as air travel began to rebound from its decline during the economic downturn. CBO projects that aviation receipts will increase again in 2011, by about 4 percent, and then rise at an average annual rate of more than 5 percent from 2012 to 2021. That growth roughly matches the growth of GDP over the same period because the main components of aviation excise taxes are levied as a percentage of dollar value, causing receipts to increase roughly with real economic activity and inflation. Under current law, most aviation taxes are

scheduled to expire on March 31 of this year, but because those taxes are dedicated to trust funds, they are extended in CBO's baseline.

**Alcohol.** Receipts from alcohol taxes will rise by about \$200 million (or 2 percent) in 2011, CBO estimates. For the period from 2011 to 2021, receipts will grow, CBO projects, at just under 2 percent per year, on average, or about 1 percentage point more slowly than real GDP.

**Health Insurers.** CBO anticipates that a total of \$91 billion in revenues will be collected through 2021 from an annual fee levied on health insurers that is scheduled to begin in 2014. The fee was instituted in the Patient Protection and Affordable Care Act, as amended, and will be based on each health insurer's share of the net premiums collected. Several types of insurers will be fully or partially exempt from the fee; they include self-insured plans, federal and state governments, and tax-exempt providers.<sup>11</sup>

**Other.** Other excise taxes are projected to raise \$145 billion in revenues over the 2012–2021 period. About two-thirds of that estimated revenue stems from fees and taxes that were instituted in PPACA, as amended: a 2.3 percent excise tax on manufacturers and importers of certain medical devices; an annual fee charged to manufacturers and importers of branded drugs; and a tax on certain high-cost employment-based health plans

Refunds of excise taxes are also a factor in CBO's projections. For the second straight year, refunds of excise taxes in 2010 were abnormally large. Many of the refunds were payments made for alternative fuel credits for the chemical produced by paper companies known as black liquor. Because that credit expired on December 31, 2009, refunds in 2011 are expected to decline by about \$3 billion.

### Estate and Gift Taxes

According to CBO's baseline projections, receipts from estate and gift taxes under current law will hover around 0.1 percent of GDP between 2010 and 2013 and then increase to 0.2 percent of GDP in 2014 and 0.3 percent of GDP thereafter. Those estimates reflect scheduled changes in the tax code.

9. Although the provisions of the Deficit Control Act that pertain to the baseline expired on September 30, 2006, CBO continues to follow that law's specifications in constructing its baseline.

10. See section 701(b) of the Children's Health Insurance Program Reauthorization Act of 2009, P.L. 111-3, 123 Stat. 8, 106.

11. Sections 9010 and 10905 of PPACA, P.L. 111-148, 124 Stat. 119, 865–867 and 1017–1019; and section 1406 of the Health Care and Education Reconciliation Act of 2010, P.L. 111-152, 124 Stat. 1029, 1065.

Under the Economic Growth and Tax Relief Reconciliation Act of 2001, estate taxes were repealed for calendar year 2010, as were generation-skipping transfer taxes that apply to transfers of wealth to an heir who is more than one generation younger than the decedent. The gift tax was maintained, however, with an effective exemption amount of \$1 million and a top tax rate of 35 percent on gifts exceeding that amount. Under the 2010 tax act, executors of estates of someone who died in 2010 could continue to follow those rules, or they could elect to follow an alternative tax structure for that year that had different rules for the estate tax but the same rules for gifts and generation-skipping transfers.

That tax treatment provided taxpayers with an incentive to make taxable gifts in calendar year 2010, especially in the form of generation-skipping transfers. As a result, CBO projects that gift tax receipts in fiscal year 2011, resulting from taxes on gifts made in 2010, will total about \$10 billion, much more than usual.<sup>12</sup> Estate tax receipts in 2011—primarily late tax payments from the estates of people who died in 2009—will be about \$1 billion, CBO estimates, yielding total estate and gift tax receipts of \$11 billion in 2011, or 0.1 percent of GDP.

Under the 2010 tax act, the estate tax applies for 2011 and 2012, with a unified effective exemption for estates and for gifts. Starting in 2011, combined lifetime gifts and bequests in excess of \$5 million (\$10 million for married couples) will be subject to a tax rate of 35 percent. Generation-skipping taxes also will be assessed. After 2012, the effective exemption will drop to \$1 million (\$2 million for married couples), and the top tax rate will rise to 55 percent for estates, gifts, and generation-skipping transfers (with a surtax of 5 percent on transfers between certain amounts).

CBO projects that estate and gift tax receipts as a share of GDP will remain at 0.1 percent in 2012 and 2013, but instead of consisting largely of gift tax receipts, as in 2011, those revenues will consist mainly of receipts from the estate tax following its reinstatement. Those estate and gift tax receipts will rise to 0.2 percent of GDP in 2014 and to 0.3 percent thereafter, CBO projects, reflect-

ing the reduction in the effective exemption amount and the increase in the top marginal tax rate.

### Receipts from the Federal Reserve System

The earnings of the Federal Reserve System are counted as revenues when they are remitted to the Treasury; the amount of those remittances reflects the income generated by the various activities of the Federal Reserve minus the cost of generating that income. (The Federal Reserve's actions also clearly influence revenues from other sources by affecting the overall economy.) The Federal Reserve's income stems from a variety of sources: interest on Treasury and other securities that the central bank holds, interest on loans to banks and other financial institutions, fees for services rendered to banks and other financial institutions, and returns on holdings of foreign-denominated assets. The Federal Reserve's costs arise in large part from the payment of interest on reserves that depository institutions hold at the Federal Reserve—currently at a rate close to the federal funds rate that financial institutions charge each other for certain overnight loans. Because the Federal Reserve pays no interest on currency in circulation (Federal Reserve notes), which ordinarily is its largest liability, the central bank's income in typical years well exceeds its costs.

Historically, Treasury securities have constituted the majority of the Federal Reserve's portfolio of holdings. In the past three years, however, the central bank has taken extraordinary measures to stabilize the financial system and the economy in the face of the most severe financial crisis and economic downturn since the Great Depression. Specifically, the Federal Reserve provided additional liquidity to depository institutions and other financial intermediaries, and it greatly increased its asset holdings and diversified its portfolio. As a result, the central bank's assets more than doubled during the second half of calendar year 2008, reaching more than \$2 trillion.<sup>13</sup>

Assets on the Federal Reserve's balance sheet continued to exceed \$2 trillion throughout 2010. Mortgage-backed securities (MBSs) issued by Fannie Mae, Freddie Mac, and Ginnie Mae made up almost half of the portfolio throughout the year; at the end of September 2010, about 90 percent of the Federal Reserve's portfolio was

12. Payments for gift tax liabilities typically are made in April of the calendar year after the gifts are given. Payments for estate tax liabilities are typically made after a lag of about nine months.

13. For additional detail, see Congressional Budget Office, *The Budgetary Impact and Subsidy Costs of the Federal Reserve's Actions During the Financial Crisis* (May 2010).

invested in three types of holdings—Treasury securities, agency debt (corporate borrowing by Fannie Mae, Freddie Mac, and the Federal Home Loan Bank system), and riskier MBSs issued by Fannie Mae and Freddie Mac.<sup>14</sup> The increased size of the Federal Reserve’s portfolio and the higher average rate of return on the set of assets in its portfolio relative to the typical return on Treasury securities caused remittances from the Federal Reserve to the Treasury in fiscal year 2010 to reach \$76 billion, more than double its remittances of \$34 billion in 2009. As a result, those receipts measured relative to GDP rose from 0.2 percent to 0.5 percent.

CBO projects that the Federal Reserve’s remittances will rise further, to \$80 billion, in 2011 and then decline each year until 2015. In 2011, the size of the Federal Reserve’s portfolio will grow, CBO expects, but lower returns on its holdings will result in overall earnings that will be very similar to those in 2010. That anticipated growth of its portfolio is attributable to the Federal Reserve’s plan, announced in November 2010, to purchase an additional \$600 billion in Treasury securities by the end of June 2011 and to reinvest in such securities any debt that either matures or is retired during that time. Returns to

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14. The MBSs are risky because of prepayment risk on the underlying mortgages; the securities pay a higher yield to compensate for that risk.

the portfolio are expected to decline because the yield on Treasury securities is much lower than the return on MBSs that will mature or be retired during that period.

Remittances from the Federal Reserve decline in CBO’s baseline in every year from 2012 through 2015, falling back to 0.2 percent of GDP, which is roughly the average of those receipts over the 2000–2009 period. That drop arises from a combination of lower rates of return and a shrinking portfolio. Beyond 2015, CBO estimates, receipts from the Federal Reserve will remain near 0.2 percent of GDP.

### **Customs Duties**

In 2010, customs duties amounted to about 0.2 percent of GDP. CBO projects that they will rise slightly, to 0.3 percent of GDP, in the latter half of the 2012–2021 period, as the value of imports increases at a faster pace than overall economic activity.

### **Other Miscellaneous Receipts**

This category of receipts, which largely consists of fees and fines, totaled 0.1 percent of revenues in 2010. CBO projects that such receipts will grow as a share of GDP after 2013 as a result of penalties and fees instituted by PPACA. By 2015, CBO estimates, other miscellaneous receipts will make up about 0.3 percent of GDP, a share they will retain roughly through 2021.

## Changes in CBO's Baseline Since August 2010

**T**he Congressional Budget Office (CBO) projects that in the absence of further legislation affecting spending and revenues, the deficit for 2011 will be nearly \$1.5 trillion, \$0.4 trillion higher than the deficit CBO projected last August, when it completed its previous baseline projections (see Table A-1).<sup>1</sup> Nearly all of the difference between the August deficit estimate for 2011 and the current one is attributable to the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312, hereafter referred to as the 2010 tax act) enacted in December.

Relative to its previous estimates for 2011, CBO has reduced its projection of revenues by \$419 billion (or 16 percent) and its projection of outlays by \$5 billion (or 0.1 percent). Provisions of the 2010 tax act constitute the main source of the reduction in revenues that CBO now estimates for 2011. The small drop in projected outlays is the net result of offsetting changes: New legislation enacted since August led CBO to raise its estimate of outlays for 2011 by \$43 billion (the increase was mostly for unemployment compensation), which was more than offset by technical updates to the projections—in particular, a reduction in anticipated outlays for the Troubled Asset Relief Program (TARP). (Technical revisions are those not directly related to changes in laws or in CBO's economic outlook.)

In addition to the estimated increase in the 2011 deficit, CBO's new baseline shows higher projected deficits over the 2011–2020 period, for a cumulative increase of \$1.4 trillion over those 10 years. That change stems from a \$1.9 trillion drop in projected revenues over the period that is partly offset by a reduction of nearly \$0.5 trillion in projected outlays. In August, CBO projected deficits totaling \$6.2 trillion for 2011 through 2020; it now esti-

mates a total deficit of \$7.7 trillion for that period. Roughly \$1.3 trillion of the projected \$1.4 trillion change in the cumulative deficit is attributable to the effects of legislation enacted since August and changes in CBO's economic forecast; less than 10 percent of the change in CBO's overall deficit projection is related to technical changes in response to new information about the operations of certain programs.<sup>2</sup>

### Changes to Projections of Revenues

CBO now projects that revenues in 2011 will be lower by \$419 billion than it had estimated in August and that over the 2011–2020 period, revenues will be reduced by a total of \$1.9 trillion (or 5 percent) for the following reasons:

- Most of the changes in the projections for 2011 and 2012 result from recently enacted legislation, primarily the 2010 tax act, which have led CBO to lower projected revenues by \$409 billion for 2011, by \$335 billion for 2012, and by \$713 billion for the 2011–2020 period.

2. CBO constructs its baseline in accordance with provisions of the Balanced Budget and Emergency Deficit Control Act of 1985 and the Congressional Budget and Impoundment Control Act of 1974. (Although the provisions of the Deficit Control Act that pertain to the baseline expired in 2006, the agency generally continues to follow that law's specifications in preparing its baseline, as agreed to in consultation with both the House and Senate Committees on the Budget.) To project revenues and mandatory spending, CBO assumes that current laws, with only a few exceptions, will remain unchanged. To project discretionary spending, CBO assumes that future appropriations will equal the current year's appropriations with adjustments (as specified in the Deficit Control Act) to reflect the effects of inflation and certain other factors. The resulting baseline projections are not intended to be a prediction of future budgetary outcomes; rather, they serve as a benchmark that lawmakers can use to measure the potential effects of spending or revenue proposals.

1. Those projections were published in *The Budget and Economic Outlook: An Update* (August 2010).

**Table A-1.****Changes in CBO's Baseline Projections of the Deficit Since August 2010**

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
											2011-	2011-
											2015	2020
Total Deficit as Projected in August 2010	-1,066	-665	-525	-438	-507	-585	-579	-562	-634	-685	-3,202	-6,246
<b>Changes to Revenue Projections</b>												
Legislative												
Individual income taxes	-227	-238	-48	-3	10	8	6	5	4	3	-506	-480
Corporate income taxes	-87	-40	7	23	41	-10	9	5	3	2	-55	-46
Social insurance taxes	-87	-30	*	-1	-1	-1	-1	-1	-1	-1	-118	-122
Other	-9	-27	-27	-3	-2	*	*	1	1	1	-68	-66
Subtotal	-409	-335	-68	16	49	-4	15	10	7	5	-746	-713
Economic												
Individual income taxes	6	-4	-36	-62	-71	-73	-79	-77	-73	-72	-167	-542
Corporate income taxes	-22	-22	-29	-32	-21	-10	-6	-6	-7	-6	-126	-161
Social insurance taxes	5	-1	-16	-26	-26	-25	-25	-27	-23	-23	-65	-188
Other	-1	-2	-2	-7	-10	-9	-9	-9	-9	-9	-21	-67
Subtotal	-11	-29	-82	-128	-129	-117	-120	-119	-113	-110	-379	-958
Technical												
Individual income taxes	7	-34	11	-6	-13	-23	-15	-24	-26	-24	-36	-148
Corporate income taxes	1	-13	-21	-12	-2	1	3	4	4	5	-46	-29
Social insurance taxes	-21	-5	-3	2	-2	-5	-9	-20	-29	-28	-29	-120
Other	13	18	17	9	5	5	*	2	6	9	63	84
Subtotal	*	-34	5	-8	-12	-21	-22	-38	-45	-38	-49	-213
<b>Total Revenue Changes</b>	<b>-419</b>	<b>-398</b>	<b>-145</b>	<b>-119</b>	<b>-92</b>	<b>-143</b>	<b>-126</b>	<b>-147</b>	<b>-151</b>	<b>-144</b>	<b>-1,174</b>	<b>-1,885</b>
<b>Changes to Outlay Projections</b>												
Legislative												
Mandatory outlays												
Earned income and child tax credits	0	36	37	0	0	0	0	0	0	0	73	73
Unemployment compensation	35	20	-1	*	*	*	*	*	*	*	53	51
Medicare	11	6	*	*	*	*	*	*	*	*	17	17
Other	8	2	6	1	1	6	-2	-7	-5	-4	18	7
Subtotal	55	63	42	*	1	6	-2	-7	-5	-4	160	148
Discretionary outlays												
Defense	-9	-14	-16	-17	-18	-19	-20	-20	-21	-21	-74	-175
Nondefense	-6	-6	-16	-18	-20	-21	-21	-22	-23	-23	-66	-176
Subtotal	-14	-20	-32	-35	-38	-40	-41	-42	-43	-44	-140	-351
Net interest outlays (Debt service)	3	12	21	27	29	30	32	33	34	34	91	254
All Legislative	43	55	31	-9	-9	-4	-11	-16	-15	-15	112	51

Continued

Table A-1.

Continued

## Changes in CBO's Baseline Projections of the Deficit Since August 2010

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
											2011-2015	2011-2020
<b>Changes to Outlay Projections (Continued)</b>												
<b>Economic</b>												
Mandatory outlays												
Medicare and Medicaid	1	1	4	6	6	4	5	7	12	14	18	61
Student loans	-1	-2	-4	-6	-7	-6	-5	-5	-5	-5	-21	-46
Social Security	*	3	3	2	*	-3	-5	-7	-9	-12	9	-27
Unemployment compensation	4	2	6	11	8	2	-1	-1	*	*	32	31
Other	*	1	4	4	4	3	1	2	2	2	12	22
Subtotal	3	5	12	17	11	*	-5	-3	-1	*	49	39
Discretionary outlays	0	*	-1	-3	-7	-14	-17	-17	-16	-15	-11	-90
Net interest outlays												
Debt service	*	1	2	6	11	14	17	20	23	25	20	120
Effect of rates and inflation	-2	-6	-17	-35	-54	-64	-64	-67	-72	-76	-114	-457
Subtotal	-2	-5	-15	-29	-44	-50	-47	-47	-49	-50	-95	-337
All Economic	1	*	-3	-15	-40	-64	-69	-67	-66	-66	-57	-387
<b>Technical</b>												
Mandatory outlays												
Social Security	2	5	7	9	11	12	13	14	16	16	33	105
TARP	-31	-2	-2	-3	1	*	*	0	0	0	-38	-37
Medicare and Medicaid	-6	-8	-8	-1	-2	2	-4	-6	-4	-3	-25	-41
Student loans	3	3	2	2	2	2	2	2	2	2	11	20
Other	-2	1	18	8	7	2	-3	-9	-8	-13	32	*
Subtotal	-34	-2	16	14	18	18	9	1	5	2	13	47
Discretionary outlays	-14	-16	-2	-1	*	-2	-1	-1	-1	*	-33	-38
Net interest outlays												
Debt service	*	-1	-1	-1	-1	*	1	1	3	5	-4	6
Other	-1	-1	-7	-13	-17	-17	-17	-17	-17	-15	-39	-122
Subtotal	-1	-2	-8	-14	-17	-17	-17	1	-14	-11	-42	-116
All Technical	-50	-19	6	-1	1	-1	-9	-15	-9	-9	-62	-107
<b>Total Outlay Changes</b>	<b>-5</b>	<b>36</b>	<b>34</b>	<b>-24</b>	<b>-48</b>	<b>-69</b>	<b>-88</b>	<b>-98</b>	<b>-90</b>	<b>-90</b>	<b>-7</b>	<b>-443</b>
<b>All Changes</b>												
<b>Total Effect on the Deficit<sup>a</sup></b>	<b>-414</b>	<b>-434</b>	<b>-179</b>	<b>-95</b>	<b>-44</b>	<b>-74</b>	<b>-38</b>	<b>-48</b>	<b>-61</b>	<b>-54</b>	<b>-1,167</b>	<b>-1,441</b>
Total Deficit as Projected in January 2011	-1,480	-1,100	-704	-533	-551	-659	-617	-610	-696	-739	-4,369	-7,688
<b>Memorandum:<sup>a</sup></b>												
Total Legislative Changes	-452	-390	-99	25	58	*	26	27	22	20	-858	-764
Total Economic Changes	-12	-29	-79	-113	-88	-54	-51	-52	-47	-44	-323	-571
Total Technical Changes	50	-15	-1	-7	-13	-21	-13	-23	-36	-30	15	-106

Source: Congressional Budget Office.

Note: \* = between -\$500 million and \$500 million; TARP = Troubled Asset Relief Program.

a. Negative numbers indicate an increase in the deficit; positive numbers represent a decrease in the deficit.

- CBO has reduced its estimates of revenues for the next 10 years by nearly \$960 billion (or 2.5 percent) as a result of changes in its economic outlook, mostly from lower projected incomes. Slightly lower projections for real (inflation-adjusted) gross domestic product (GDP) and for prices contribute to those changes.
- CBO has decreased its revenue projections for the 10-year period by about \$210 billion because of technical factors related to new information and analysis that affect estimates of the amount of revenue to be raised from a given level of economic activity.

### Legislative Changes

As a result of legislation enacted since August—most significantly, the 2010 tax act—CBO has reduced its projections of revenues for 2011 and 2012 by a total of \$744 billion and its estimate for 2013 by \$68 billion and raised its projection of revenues for the 2014–2020 period by \$98 billion.

Enactment of the 2010 tax act decreases projected revenues by \$780 billion from 2011 to 2013 and boosts them by \$59 billion from 2014 to 2020. The legislation extends for two years a number of income tax reductions enacted in 2001, 2003, and 2009 that had been scheduled to expire at the end of calendar year 2010, as well as relief from the alternative minimum tax that expired at the end of calendar year 2009 (see Box 1-1 on page 8). In all, those provisions reduce revenues by an estimated \$447 billion over the 2011–2013 period (and also increase outlays for refundable tax credits by \$77 billion over that time);<sup>3</sup> over the 2011–2020 period, those provisions reduce revenues by a total of \$463 billion.

Besides those extensions, the 2010 tax act includes several new provisions that significantly affect revenues. A modified estate and gift tax structure for calendar years 2011 and 2012 (and some modifications to the tax structure in effect for 2010) are estimated to lower revenues by \$68 billion over the 2011–2020 period, largely in the first three years. In addition, a reduction of 2 percentage points in the employee payroll tax for Social Security in 2011 is expected to reduce revenues by \$84 billion in 2011 and by \$28 billion in 2012. Also part of the 2010

3. Refundable credits reduce a taxpayer's overall tax liability; if the credit exceeds that liability, the excess may be refunded to the taxpayer, in which case it is recorded as an outlay in the budget.

act is an allowance for full expensing (immediate deduction from a business's taxable income) of equipment investments made after September 8, 2010, and before December 31, 2011, and 50 percent expensing of such investments for 2012. The expensing provisions are estimated to reduce revenues by \$110 billion (\$55 billion a year in both 2011 and 2012) and then to raise revenues by \$89 billion over the 2013–2020 period, when firms can claim fewer depreciation deductions from taxable income for those investments. Other provisions in the 2010 act, generally one- or two-year extensions of provisions that have been extended in the past, will reduce revenues by \$53 billion over the 2011–2013 period, in CBO's estimation, and by an additional \$5 billion from 2014 through 2020, relative to CBO's August 2010 projections.

Enactment of the Small Business Jobs Act of 2010 (Public Law 111-240) has caused CBO to lower its projection of revenues for 2011 by \$55 billion and to raise its estimates for 2012 through 2020 by \$58 billion. The legislation's largest effects on revenues stem from its extension to 2010 of 50 percent expensing for businesses' purchases of equipment, which will reduce receipts by an estimated \$40 billion for 2011 and increase revenues by an estimated \$35 billion for 2012 through 2020. (That provision was later superseded by the provision in the 2010 tax act that allowed full expensing for a portion of the equipment investments businesses made in 2010.) In addition, the Small Business Jobs Act permits full expensing of equipment purchases in 2010 and 2011 for businesses with relatively small amounts of such investment; that provision has led to a reduction in CBO's revenue projection for 2011 of \$10 billion and an increase in projections for the 2012–2020 period of \$8 billion. The legislation also includes some provisions that are projected to raise revenues in all years of the projection period. One such provision allows the taxable conversion of sums in traditional 401(k) plans (and certain government plans) to Roth-type accounts; the provision is estimated to increase revenues by \$5 billion over the 2011–2020 period. In addition, other provisions raise projected revenues, on net, by about \$5 billion over 10 years.

### Economic Changes

Because of revisions to its economic outlook since August, CBO has lowered its 2011 projection of revenues by \$11 billion and its cumulative estimate for the 2011–

2020 period by \$958 billion (or 2.5 percent). The changes largely result from two factors:

- Reductions in the estimates of domestic corporate profits for the first half of the projection period, in part stemming from substantially lower estimates of profits for 2010; and
- Lower projections of nominal GDP, especially after 2012, that result from reductions in projected real GDP and in CBO's forecast of the GDP price index; those changes lead to lower estimates of taxable income—in particular, wages and salaries, the largest and most highly taxed source of income.

The relatively small reductions in the revenue projections for 2011 and 2012, compared with CBO's projections in August, result primarily from a \$43 billion drop in the projection of receipts from corporate income taxes for those two years—because of lower projected domestic corporate profits. CBO has reduced its projections of those profits for two reasons: Its projection of nominal GDP is now slightly lower (down by 0.6 percent over the two years), and its estimate of the share of GDP attributable to corporate profits is smaller. In contrast, as a result of a larger estimated wage and salary share of GDP in 2011, CBO has slightly raised its projection of individual income and payroll tax receipts for that year.

The greater downward reductions in revenues that CBO projects for 2013 through 2020—totaling about \$918 billion (or 2.8 percent of revenues)—largely follow from its lower current projections for nominal GDP during that period. CBO has reduced those projections by about 2 percent, initially as a result of a slightly slower anticipated pace of economic recovery through 2014 and also because of slightly less GDP price inflation projected for 2014 through 2020; most of the lower projected amount of real GDP in 2014 is offset by slightly faster growth through 2020. In addition, CBO now estimates that interest earned by individuals will account for a smaller share of GDP than it had projected in August, which lowers revenues slightly relative to GDP.

### Technical Changes

Since August, CBO has reduced its revenue projections for the 2011–2020 period by \$213 billion (or 0.6 percent) because of technical factors related to new information and analysis that affect estimates of the amount of

revenue likely to be raised from a given level of economic activity. Such technical factors caused almost no net change in CBO's projection of revenues for 2011 but led to a drop of \$34 billion for 2012, an increase of \$5 billion for 2013, and a drop of \$184 billion for the 2014–2020 period.

For the 2011–2013 period, different technical adjustments to CBO's revenue projections for 2011 and 2013 largely offset each other; for 2012, those adjustments reinforce each other. Four factors explain most of the variation: a projected shift in individual income tax revenues from 2011 and 2012 into 2013, which results from an expected slowdown in payments by taxpayers of what they owe for those earlier years; a drop in corporate income tax receipts for 2012 and 2013, reflecting CBO's new lower projections of the profits of profitable firms (which are taxable) and the losses of unprofitable firms (which have only a limited ability to affect income taxes) for a given amount of profits in the economic forecast (which CBO calculates as profits net of losses); a slight extension of the period over which the recent unexplained weakness in individual income tax receipts is projected to dissipate, which ends up reducing receipts for 2012 and 2013; and an increase in the receipts expected from the Federal Reserve over the 2011–2013 period to reflect both the central bank's decision to purchase additional Treasury securities and an upward adjustment to the projected yield on its existing portfolio of holdings.

For the years following 2013, the trend in technical revisions to CBO's projections is for the most part downward: CBO has lowered its estimate of revenues for 2014 by \$8 billion and its projections thereafter by generally increasing amounts that reach about \$40 billion for each year from 2018 through 2020. The factors responsible for those changes include the following: reductions in expected distributions from pension plans and individual retirement accounts as a result of smaller-than-expected amounts in those accounts in 2010, and a reduction in projected revenues from unemployment insurance taxes—because CBO now expects states to raise a smaller amount of revenue for replenishing their depleted unemployment insurance trust funds.

### Changes to Projections of Outlays

CBO has lowered its estimate of outlays for 2011 by \$5 billion since August, the net result of a drop in

projected outlays of \$50 billion because of technical changes that is mostly offset by increases of \$43 billion stemming from legislative changes and \$1 billion related to economic factors. The reduction in estimated spending spurred by technical changes arises largely from estimated costs for the TARP that are lower than previously projected; the increase in outlays stems from recently enacted laws that affect unemployment compensation, various refundable tax credits, and Medicare.

For the 2011–2020 period, projected outlays are down by \$443 billion (or 1 percent), relative to CBO’s August baseline. Over that period, discretionary outlays (those resulting from budget authority provided in yearly appropriations) are \$478 billion lower, and net interest costs are \$199 billion lower than the agency had previously estimated. Those reductions are partially offset by an increase of \$234 billion in estimated mandatory outlays (those resulting from provisions of permanent law).

### Legislative Changes

Legislation enacted since CBO prepared its August baseline has boosted the agency’s estimate of outlays for 2011 by \$43 billion and its cumulative projection for the 2011–2020 period by \$51 billion. Increases in estimated outlays for mandatory programs (including refundable tax credits) and debt service are partially offset by reductions in projected discretionary spending for both 2011 and the 10-year period. (As explained below, that reduction in projected discretionary spending reflects the fact that appropriated funding provided thus far for 2011 is governed by a continuing resolution that generally keeps funding at the 2010 appropriation levels.)

**Earned Income and Child Tax Credits.** Among other changes, the 2010 tax act extends three tax provisions that affect outlays: the \$1,000 refundable child tax credit, the threshold of earned income (\$3,000) above which the refundable child tax credit accrues, and expansions in the refundable earned income tax credit. In addition, the legislation reduces individual income tax rates and increases some other tax deductions, which boost the amount of the child and earned income tax credits that is refundable. As a result, CBO has increased its projection of outlays for the refundable portions of those credits for 2012 and 2013 by \$36 billion and \$37 billion, respectively.

**Unemployment Benefits.** The 2010 tax act extends benefits for emergency unemployment compensation, under which long-term unemployed workers can continue to

collect emergency benefits for up to 53 weeks (in addition to the regular and extended benefits available under permanent law). Without that extension, emergency benefits would have been phased out beginning in January 2011; the phaseout will now begin one year later (if no subsequent changes in law are enacted). That extension, in CBO’s estimation, will add \$35 billion to outlays this year and another \$21 billion to outlays in 2012. In the other direction, provisions of the Claims Resolution Act of 2010 (P.L. 111-291) are expected to reduce net unemployment benefits by about \$5 billion over the 2012–2020 period, mostly by allowing states to use the Internal Revenue Service to collect overpayments of benefits from the tax refunds of people who wrongly received those payments. (CBO estimates that most of those savings will be offset by reductions in state unemployment tax receipts.)

**Medicare.** Since CBO prepared its August baseline, two new laws have been enacted that affect the agency’s estimates of spending for the Medicare program: the Medicaid and Medicare Extenders Act of 2010 (P.L. 111-309) and the Physician Payment and Therapy Relief Act of 2010 (P.L. 111-286). Each of those laws postponed the scheduled cuts to payment rates for certain physicians’ services as specified by the sustainable growth rate formula and boosted the 2011 payment rates for certain other providers. Those changes have led CBO to increase its estimate of Medicare outlays by \$11 billion (or 2 percent) for 2011 and by \$17 billion (or 0.3 percent) for the 2011–2020 period.

**Discretionary Spending.** CBO has updated its projections of discretionary spending on the basis of the funding levels provided in the Continuing Appropriations and Surface Transportation Extensions Act, 2011 (P.L. 111-322). With some exceptions, that continuing resolution provides funding for the current year through March 4 at the same level as that provided for 2010. Following the rules that govern the creation of its baseline, CBO assumes that such appropriations will be extended for the full year. As a result, the current baseline projections of discretionary spending for 2011 begin from a level of funding that is \$36 billion lower than was projected for 2011 in the August 2010 baseline; extrapolating from that lower figure has caused CBO’s projections of discretionary spending to drop across the 2011–2020 period, a change nearly evenly divided between defense and non-defense programs. CBO now projects outlays for discretionary defense programs that are lower by \$9 billion for

2011, relative to the previous baseline, and lower by \$175 billion for the 2011–2020 period; it projects outlays for nondefense discretionary programs that are \$6 billion lower for 2011 and \$176 billion lower for the 10-year period.

**Net Interest.** The revisions to CBO’s estimates of outlays and revenues related to legislative actions, as described above, have led CBO to increase its projection of the cumulative deficit for 2011 through 2013, excluding interest, by \$905 billion and decrease the projection for the 2014–2020 period by \$395 billion. Although changes resulting from legislation produce a drop in the cumulative deficit starting in 2014, projected debt-service costs still increase by a total of \$254 billion through 2020, because the years in which deficits are projected to rise as a result of enacted legislation (primarily 2011 and 2012) occur early in the period and the changes in those years have the greatest effect.

### Economic Changes

In updating its economic forecast, CBO modified its projections of certain variables that affect outlays—including inflation, the unemployment rate, and interest rates. Such revisions have caused the agency to increase its estimate of outlays for 2011 by \$1 billion but decrease its outlay estimate for the 2011–2020 period by \$387 billion. Projected interest costs in CBO’s baseline have declined substantially since August; however, those changes have been partially offset by increases (attributable to CBO’s new economic forecast) in estimated outlays for Medicare, Medicaid, and unemployment compensation.

**Medicare.** Payment rates for most services in the fee-for-service sector of Medicare—including hospital care and services furnished by physicians, home health agencies, and skilled nursing facilities—are subject to automatic updates based on changes in the prices of the goods and services that health care providers purchase. As a result, changes in CBO’s forecast of spending for labor-related and nonlabor inputs—that is, goods and services used by health care providers—in the coming decade boost projected outlays for Medicare by \$32 billion over the 2011–2020 period.

**Medicaid.** CBO has raised its projection of spending for Medicaid by a little more than \$28 billion over the 10-year period to reflect its new economic forecast. That increase results principally from the higher growth rate that CBO now projects for hospital payment rates and

from higher projected costs for labor-related and non-labor inputs for other health care providers. In addition, CBO now expects a more gradual reduction in the unemployment rate as the economy improves, which leads to greater enrollment in Medicaid than the August baseline reflected.

**Student Loans.** Consistent with the procedures set forth in the Federal Credit Reform Act of 1990, CBO estimates annual outlays for the federal student loan program in terms of the present value of the federal government’s cash flows related to new loans disbursed in each year, and it uses the Treasury’s borrowing rates to discount those cash flows.<sup>4</sup> In updating its economic forecast, CBO has reduced its estimate of those rates relative to its August projection for all years of the 2011–2020 period. Because the interest rates charged to borrowers of federal student loans are fixed by law, a lowering of the projected rates on Treasury securities, which are used to discount the cash flows for such loans, increases the present value of the principal and interest payments made to the government, resulting in lower net costs for those loans. Accordingly, CBO now projects that outlays for student loans will be \$46 billion lower than in the previous baseline.

**Social Security.** As a result of changes in its economic forecast, CBO’s projections of spending for Social Security over the 2011–2020 period have declined by \$27 billion. Lower expected growth in wages and salaries and slightly lower projected cost-of-living adjustments (COLAs) from 2013 through 2017 have led CBO to reduce projected Social Security outlays; those reductions are partially offset by the impact of an increase in the expected COLA in January 2012 (to 1.1 percent versus the 0.7 percent incorporated in the August baseline).

**Unemployment Compensation.** CBO now expects that the economic recovery will unfold more gradually than it had anticipated last summer and that the unemployment rate will remain elevated for a longer period. Between 2011 and 2015, the unemployment rate is projected to be about 0.8 percentage points higher each year, on average, than the agency projected last August. Consequently,

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4. The present value is a single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The present value depends on the rate of interest (known as the discount rate) that is used to translate future cash flows into current dollars.

spending for unemployment benefits is estimated to be higher by \$4 billion this year and by \$31 billion over the 2011–2020 period.

**Discretionary Spending.** CBO projects spending for discretionary programs using the GDP price index and the employment cost index (ECI) for private wages and salaries. CBO’s current estimate of the GDP price index remains nearly unchanged from its estimate in August, whereas its estimate of the ECI is lower by an average of 0.5 percentage points through 2015. Those changes in turn lead to a reduction of \$90 billion in projections of discretionary outlays for 2011 through 2020.

**Net Interest.** Economic revisions to CBO’s projections of spending for net interest have two components: the effects of changes in the government’s borrowing that result from the impact of economic changes on other, noninterest outlays and on revenues; and the effects of changes in the agency’s economic outlook related to interest rates and inflation. In CBO’s updated projections for 2011 through 2020, the changes in estimated outlays produced by those two effects move in opposite directions: Estimated debt-service costs are \$120 billion higher than in the August baseline (resulting mainly from lower projected revenues attributable to the revised economic forecast), and estimated changes in net interest related to updated projections of interest rates and inflation are \$457 billion lower (primarily because of changes in projected interest rates). CBO now projects that throughout the 2011–2020 period, interest rates on securities with a maturity of two years or longer will be lower by between 4 basis points and 96 basis points;<sup>5</sup> further, it estimates that rates on securities with a maturity of one year or less will be lower beginning in 2012 by between 35 basis points and 96 basis points. Overall, CBO projects that economic changes to net interest will decrease outlays over the 2011–2020 period by \$337 billion relative to its August estimates.

### Technical Changes

Technical revisions to CBO’s estimates of outlays for 2011 account for a net decrease of \$50 billion. The largest change for the current year results from an adjustment to the projected cost of activities funded through the TARP. For the entire 10-year baseline period, technical changes lower CBO’s projections of outlays by a total of

\$107 billion. That overall reduction is the net result of drops in projected discretionary outlays (\$38 billion) and net interest costs (\$116 billion) that are partially offset by an increase of \$47 billion in projected mandatory outlays.

**Social Security.** CBO has modestly increased its projection of Social Security spending on the basis of updated information about the Old-Age and Survivors Insurance (OASI) program and the Disability Insurance (DI) program, the two components of Social Security. The agency now estimates that the number of people receiving benefits under the OASI program will increase relative to the number CBO expected last August, mostly on the basis of the Social Security Administration’s updated projection of the size of the population eligible to receive benefits. For the DI program, CBO expects larger caseloads over the 2011–2020 period on the basis of greater-than-expected growth in caseloads in 2010 and a larger projected number of jobless individuals applying for DI benefits (as a result of the higher unemployment rates that CBO now anticipates over the next decade). The agency also expects average new DI award amounts to be slightly higher each year than it had previously projected. Together, those changes boost projected Social Security outlays each year through 2020, for a total 10-year increase of \$105 billion (1 percent).

**Troubled Asset Relief Program.** Relative to its August estimate, CBO has reduced its projection of outlays for the TARP by \$31 billion for 2011 and by an additional \$6 billion for the 2012–2020 period. The drop in estimated subsidy costs for the program primarily results from additional repurchases of preferred stock by participants in the TARP’s Capital Purchase Program, lower projected costs for assistance to the American International Group and the automotive industry, and smaller expected disbursements for mortgage programs.<sup>6</sup>

**Medicare and Medicaid.** CBO has lowered its 10-year (2011 to 2020) projections of spending for Medicaid and Medicare by \$25 billion and \$16 billion, respectively, to reflect a variety of technical changes, including updated information from the Centers for Medicare and Medicaid Services regarding actual spending for and enrollment in the two programs. Those technical changes partially offset the combination of economic and legislative changes

5. A basis point is one-hundredth of a percentage point.

6. For more information on the TARP, see Congressional Budget Office, *Report on the Troubled Asset Relief Program—November 2010*.

(described above) that raised projections of spending for Medicare and Medicaid. Taken together, those economic and legislative changes boosted CBO's projections of Medicare and Medicaid spending relative to its August estimates by about \$78 billion—in contrast to the downward technical revisions to those projections that reduced them by roughly \$41 billion.

**Student Loans.** CBO has updated its projections of outlays for the federal student loan program by incorporating recent data from the National Student Loan Data System. On the basis of that information, CBO has adjusted its cash-flow projections to reflect a smaller volume of future student loans and an update to the average length of time between the disbursement of various student loans and the beginning of their repayment. Such changes lead to an additional \$20 billion in estimated outlays between 2011 and 2020. (Consistent with the budgetary treatment required by the Federal Credit Reform Act, CBO calculated that revision to projected outlays as a change in the net present value of all cash flows associated with new student loans provided over the 10-year period.)

**Discretionary Spending.** Upward and downward adjustments in several areas of the budget have led to a net decrease of \$14 billion in CBO's estimate of discretionary outlays for 2011 and a net decrease of \$38 billion in its projection for the 2011–2020 period. In particular, CBO has reduced its estimate of defense outlays by \$2 billion for 2011 and by \$22 billion for the 2011–2020 period, primarily to reflect lower-than-anticipated spending by the Department of Defense for operations and maintenance as well as the department's revised estimates of its annual payments to the fund that covers the health care costs of certain retirees.

Among the largest revisions in CBO's 10-year baseline projections for nondefense programs are lower expected outlays for the Pell Grant program (\$15 billion); that reduction stems from a change in CBO's estimating methodology, which now projects outlays for the upcoming award year on the basis of available budget authority. (Previously, CBO estimated outlays for the upcoming year on the basis of the program's costs, irrespective of budget authority.)

**Net Interest.** As a result of technical updates, CBO's estimate of net interest outlays has dropped negligibly for 2011 but is \$116 billion lower for the 2011–2020 period.

For the 10-year baseline period, CBO has reduced its projections of interest costs by \$122 billion, mostly owing to changes it anticipates in the projected mix of securities that the Treasury uses for borrowing and an increase in the receipts from nonbudgetary credit financing accounts. Specifically, in the case of the Treasury's borrowing, CBO has shifted its projection of the mix of that borrowing for the next few years away from bills (maturities of less than 1 year) and shorter-term notes (2- and 3-year maturities) and toward longer-term securities (7- and 10-year notes and 30-year bonds) and inflation-protected securities. That change increases outlays in the short term (because longer-term securities tend to carry higher interest rates) but decreases them in the medium term, because current medium- and long-term rates are lower than the short-term rates that are projected for later in the period. In total, changes in the mix of the Treasury's borrowing reduce outlays by \$37 billion over the 10-year projection period.

Net disbursements from the nonbudgetary financing accounts are higher in CBO's current baseline than in its August estimates.<sup>7</sup> Higher net disbursements require the financing accounts to borrow more from the Treasury and to pay it more interest on the borrowed funds. As a result, receipts of such interest are projected to increase, relative to the previous projection, by a total of \$65 billion over the 2011–2020 period.

The remaining \$20 billion of the 10-year decrease in interest costs not attributable to debt service is the net result of upward and downward adjustments in a number of other accounts. In addition, other technical revisions that increase projections of borrowing boost debt-service costs by \$6 billion between 2011 and 2020.

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7. A financing account reconciles subsidies calculated on an accrual basis with the cash flows associated with credit activities, tracking flows between the Treasury, the program account, and the public. Such accounts are required for credit programs (by the Federal Credit Reform Act of 1990), and their receipts and disbursements are not recorded in the budget.



## How Changes in Economic Projections Can Affect Budget Projections

**T**he federal budget is highly sensitive to economic conditions. Revenues depend on the amount of taxable income, including wages and salaries, other (nonwage) income, and corporate profits. Those types of income generally rise or fall with overall economic activity, although not necessarily in proportion. Spending for many mandatory programs depends on inflation, either directly (as with Social Security) or indirectly (as with Medicaid). In addition, the Treasury regularly refinances portions of the government’s outstanding debt—and issues more debt to finance any new deficit spending—at market interest rates. Thus, the amount that the federal government spends for interest on its debt is directly tied to those rates.

To show how projections for the economy can affect projections of the federal budget, the Congressional Budget Office (CBO) has constructed simplified “rules of thumb.” The rules provide a rough sense of how changes in individual economic variables, taken in isolation, would affect the budget totals; the rules of thumb are not intended to substitute for a full analysis of the implications of alternative economic forecasts.

The rules of thumb are applied to four variables:

- Real (inflation-adjusted) growth of the nation’s gross domestic product (GDP),
- Interest rates,
- Inflation, and
- Wages and salaries as a share of GDP.

CBO’s rule of thumb for real growth shows the effects of growth rates that are 0.1 percentage point lower each year, beginning in January 2011, than the rates that

underlie the agency’s baseline budget projections. (The budget projections are summarized in Chapter 1, and the economic projections are described in Chapter 2.) The rules of thumb for interest rates and inflation assume that those rates are 1 percentage point higher each year, also starting in January 2011, than the rates used in the baseline. The final rule assumes that, beginning in January 2011, wages and salaries as a percentage of GDP are 1 percentage point more each year than those used in the baseline. Correspondingly, domestic economic profits are assumed to be 1 percentage point smaller each year relative to GDP. (The scenario incorporates no changes in the projected nominal or real GDP.)

Each rule of thumb is roughly symmetrical. Thus, if economic growth was higher or interest rates, inflation, or wages and salaries as a percentage of GDP were correspondingly lower than CBO projects, the effects would be about the same as those shown here, but with the opposite sign.

CBO chose the variations of 0.1 percentage point or 1 percentage point solely for the sake of simplicity. Those changes do not necessarily indicate the extent to which actual economic performance might differ from CBO’s assumptions. For example, although the rule of thumb for real GDP shows the effects of a 0.1 percentage-point change in the average rate of growth over the next 10 years, the standard deviation of growth rates of real GDP over 10-year periods is roughly six times larger, or about 0.6 percentage points.<sup>1</sup> However, the 1 percentage-point change used in the rules of thumb for the other

1. A conventional way to measure past variability is to use the standard deviation. In the case of GDP growth, CBO calculates the extent to which actual growth over 10-year periods differs from the post-World War II average. The standard deviation is the size of the difference that is exceeded about one-third of the time.

variables turns out to be closer to historical deviations for those variables. The standard deviation for the 10-year average of real interest rates for 10-year Treasury notes is about 1.5 percentage points. Standard deviations for inflation and for wages and salaries as a percentage of GDP are about 1.9 and 2.1 percentage points, respectively.

## Lower Real Growth

Stronger economic growth improves the budget's bottom line, and weaker growth worsens it. The first rule of thumb illustrates the effect of slightly weaker-than-expected economic growth on federal revenues and outlays.<sup>2</sup>

CBO's baseline shows growth of real GDP at 2.7 percent in calendar year 2011, increasing to 3.8 percent by 2015. From 2016 to 2021, real GDP is projected to increase by an average of 2.5 percent. Subtracting 0.1 percentage point from each of those rates implies that, by 2021, GDP would be roughly 1 percent smaller than in CBO's baseline.

Slower growth of GDP would have several effects on the budget. For example, it would imply less growth in taxable income and thus lower tax revenues—\$1 billion less in 2011 and \$55 billion less in 2021 (see Table B-1). With a smaller amount of revenues, the federal government would need to borrow more and thus would incur higher interest costs. Additional payments to service federal debt would be minimal during the first few years of the 10-year projection period, but larger in later years, with the increase reaching \$13 billion by 2021. Mandatory spending, however, would be only marginally affected by slower economic growth: Medicare outlays would be slightly lower, but that decrease would be partially offset by higher outlays for the refundable portions of the earned income and child tax credits.<sup>3</sup>

All told, if growth of real GDP each year was 0.1 percentage point lower than is assumed in CBO's baseline,

2. A change in the rate of real growth could affect other economic variables, such as inflation and unemployment; however, CBO's rule of thumb does not include such interaction effects.
3. Medicare's payment rates for physicians' services are computed using a formula that compares annual spending with a target amount that partly reflects the growth of GDP.

annual deficits would be larger by amounts that would climb to \$68 billion in 2021. The cumulative deficit for 2011 through 2021 would rise by \$310 billion.

## Higher Interest Rates

The second rule of thumb illustrates the sensitivity of the budget to changes in interest rates, which affect the flow of interest payments to and from the federal government. When the budget is in deficit, the Treasury must borrow additional funds from the public to cover any shortfall. The Treasury refinances a substantial portion of the nation's debt each year at market interest rates. Those rates also determine how much the Federal Reserve earns on its holdings of securities (which are counted in debt held by the public), which in turn affects federal revenues.

If interest rates on all types of Treasury securities were 1 percentage point higher each year through 2021, compared with the interest rates underlying the baseline, and all other economic variables were unchanged, the government's interest costs would be \$15 billion greater in 2011 (see Table B-1). Most marketable government debt is in the form of coupon securities—which consist of notes, bonds, and inflation-protected securities—and has a maturity greater than one year. As Treasury securities mature, they are replaced with new ones. Therefore, the budgetary effects of higher interest rates would mount each year, climbing to an additional \$161 billion in 2021 under this scenario.

As part of its conduct of monetary policy, the Federal Reserve buys and sells Treasury and other securities, including, recently, a large amount of mortgage-backed securities. The Federal Reserve also pays interest on reserves held at the Federal Reserve by depository institutions. The interest that the Federal Reserve earns on its portfolio of securities and the amount that it pays on reserves help determine its profits, which are counted as revenues when they are remitted to the Treasury. If all interest rates were 1 percentage point higher than CBO projects, the Federal Reserve's profits—and thus its remittances to the Treasury—would initially fall because higher interest payments on reserves would outstrip additional interest earnings on its portfolio. However, over time, the current holdings in the portfolio would mature and be replaced with higher-yielding investments; CBO projects that by 2014 the Federal Reserve's remittances

**Table B-1.****How Selected Economic Changes Might Affect CBO's Baseline Budget Projections**

(Billions of dollars)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	
												2012-	2012-
												2016	2021
<b>Growth Rate of Real GDP Is 0.1 Percentage Point Lower per Year</b>													
Change in Revenues	-1	-4	-8	-12	-17	-22	-28	-34	-40	-47	-55	-63	-266
Change in Outlays													
Mandatory spending	*	*	*	*	*	*	*	*	*	*	-1	*	-2
Debt service	*	*	*	1	1	2	4	6	8	10	13	5	46
Total	*	*	*	1	1	2	4	5	8	10	13	5	44
<b>Change in Deficit<sup>a</sup></b>	<b>-1</b>	<b>-4</b>	<b>-8</b>	<b>-13</b>	<b>-18</b>	<b>-24</b>	<b>-31</b>	<b>-39</b>	<b>-48</b>	<b>-57</b>	<b>-68</b>	<b>-67</b>	<b>-310</b>
<b>Interest Rates Are 1 Percentage Point Higher per Year</b>													
Change in Revenues	-8	-4	-2	1	3	4	6	8	9	11	12	1	47
Change in Outlays													
Higher rates	15	47	68	83	95	108	119	130	140	151	161	400	1,101
Debt service	*	1	3	6	11	17	23	31	39	48	58	38	237
Total	15	48	71	89	106	124	142	161	179	199	219	438	1,338
<b>Change in Deficit<sup>a</sup></b>	<b>-23</b>	<b>-52</b>	<b>-74</b>	<b>-88</b>	<b>-103</b>	<b>-120</b>	<b>-136</b>	<b>-153</b>	<b>-169</b>	<b>-189</b>	<b>-207</b>	<b>-437</b>	<b>-1,292</b>
<b>Inflation Is 1 Percentage Point Higher per Year</b>													
Change in Revenues	5	36	74	117	163	215	272	334	402	477	560	605	2,650
Change in Outlays													
Discretionary spending	0	7	19	32	46	61	77	94	112	131	151	165	730
Mandatory spending	2	15	32	55	79	105	132	163	199	238	282	286	1,300
Higher rates <sup>b</sup>	20	58	81	98	113	127	141	154	167	180	192	477	1,311
Debt service	*	1	3	5	9	13	18	24	29	34	40	31	176
Total	23	81	135	190	246	307	369	435	507	583	665	959	3,517
<b>Change in Deficit<sup>a</sup></b>	<b>-18</b>	<b>-45</b>	<b>-61</b>	<b>-73</b>	<b>-83</b>	<b>-91</b>	<b>-97</b>	<b>-101</b>	<b>-105</b>	<b>-106</b>	<b>-105</b>	<b>-354</b>	<b>-867</b>
<b>Wages and Salaries' Share of GDP Is 1 Percentage Point Higher per Year</b>													
Change in Revenues	6	6	9	12	13	14	14	16	17	18	19	54	138
Change in Outlays (Debt service)	*	*	*	-1	-2	-2	-3	-4	-5	-7	-8	-6	-33
<b>Change in Deficit<sup>a</sup></b>	<b>7</b>	<b>6</b>	<b>10</b>	<b>13</b>	<b>15</b>	<b>16</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>24</b>	<b>27</b>	<b>60</b>	<b>171</b>
<b>Memorandum:</b>													
Deficit in CBO's													
January 2010 Baseline	-1,480	-1,100	-704	-533	-551	-659	-617	-610	-696	-739	-763	-3,547	-6,971

Source: Congressional Budget Office.

Note: GDP = gross domestic product; \* = between -\$500 million and \$500 million.

a. Negative amounts indicate an increase in the deficit; positive amounts indicate a reduction in the deficit.

b. The change in outlays attributable to higher rates in this scenario is different from the estimate in the rule of thumb for interest rates because the principal of inflation-protected securities issued by the Treasury grows with inflation.

would begin to rise as a result of higher projected interest rates.

The larger deficits generated by the increase in interest payments would require the Treasury to raise more cash than is assumed in the baseline. The extra borrowing would result in further increases in the annual cost of servicing the debt that would grow to \$58 billion in 2021.

Altogether, if interest rates were a full percentage point higher than the rates assumed in CBO's baseline, the budget's bottom line would worsen by increasing amounts over the projection period, from \$23 billion in 2011 to \$207 billion in 2021. The cumulative deficit over the 10-year period would grow by \$1.3 trillion. That total is more than \$900 billion larger than the effect CBO calculated just three years ago and is a direct result of the huge increase in debt that has accumulated recently and that is expected to continue to mount. In January 2008, under the laws in effect at that time, CBO projected that debt held by the public would total about \$5 trillion by the end of 2018; in CBO's current projections, debt held by the public is close to \$16 trillion by the end of 2018 and exceeds \$18 trillion by the end of 2021.<sup>4</sup>

## Higher Inflation

The third rule of thumb shows the budgetary effect of inflation that is 1 percentage point higher than is assumed in the baseline. Higher inflation increases both revenues and outlays, with a net effect of increasing budget deficits.

Higher inflation leads to increases in wages and other income, which translate directly into more income and payroll taxes being withheld from individuals' paychecks. The effect of inflation on revenues is dampened (with a lag) because the thresholds for various tax brackets are indexed to rise with inflation. The faster growth in prices also boosts corporate profits, leading to increased federal receipts from businesses' quarterly estimated tax payments.

Higher inflation also increases the cost of many mandatory spending programs, and it results in projections of increased discretionary spending. Many mandatory pro-

grams automatically adjust benefits each year to reflect price increases. Social Security, federal employees' retirement programs, Supplemental Security Income, disability compensation for veterans, the Supplemental Nutrition Assistance Program (formerly known as Food Stamps), and child nutrition programs, among others, are adjusted (with a lag) for changes in the consumer price index or one of its components. Many Medicare payment rates also are adjusted annually for inflation. Other programs, such as Medicaid, are not formally indexed to price changes but grow with inflation nonetheless. In addition, to the extent that initial benefit payments to participants in retirement and disability programs are related to wages, changes in nominal wages as a result of inflation will be reflected in future outlays for those programs. Finally, future spending for discretionary programs is projected on the basis of assumed rates of growth in wages and prices. (The baseline for discretionary spending holds funding levels constant in real terms by adjusting the most recent annual appropriation amounts for such anticipated inflation.)

Inflation also has an impact on federal net interest outlays because it affects nominal long-term interest rates. For example, if inflation rises, interest rates will climb (all else being equal), and new federal borrowing will incur higher interest costs. For this rule of thumb, CBO assumed that nominal interest rates would rise in step with inflation. Inflation-indexed securities also would incur higher projected costs with higher inflation.

If inflation each year was 1 percentage point higher than the rate in CBO's baseline, total revenues and outlays over the 10-year period would each be about 7 percent larger than in the baseline. Over the 2011–2021 period, the deficit would increase by a total of \$867 billion (of which \$176 billion would be debt-service costs) (see Table B-1).

## Wages and Salaries as a Larger Share of GDP

Because different types of income are taxed at different rates, changes over time in the share of total income represented by each type have contributed to changes in federal tax receipts measured as a percentage of GDP. Considerable uncertainty surrounds projections of those income shares.

4. Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2008 to 2018* (January 2008).

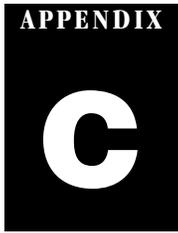
Two important income categories for federal revenues are wages and salaries and domestic economic profits. Wages and salaries are the most highly taxed form of income because they are subject to the individual income tax as well as to payroll taxes for Social Security (up to a maximum annual amount) and for Medicare. Thus, an additional dollar of wages and salaries will generally produce more revenues than will an additional dollar of economic profits. Higher wages and salaries and correspondingly smaller profits will thus result in larger federal revenues.

In CBO's baseline, wages and salaries equal about 45 percent of GDP, on average, between 2011 and 2021, and domestic economic profits equal 8 percent

(see Chapter 4). If, instead, wages and salaries each year were 1 percentage point larger relative to GDP and economic profits were 1 percentage point smaller, annual revenues would be \$6 billion greater in 2011 and \$19 billion greater by 2021 (see Table B-1).

The larger amount of revenues that would result from an increase in wages and salaries as a share of GDP would further improve the budget's bottom line by reducing the borrowing costs estimated in the baseline in each year of the projection period. By 2021, that decrease in interest payments would gradually reach \$8 billion. Overall, under this scenario, the cumulative 10-year deficit would be \$171 billion smaller than in CBO's baseline.





## Trust Funds and Measures of Federal Debt

**T**he federal government uses several accounting mechanisms to link earmarked receipts—money designated for a specific purpose—with corresponding expenditures. Those mechanisms include trust funds (such as the Social Security trust funds), special funds (such as the fund the Department of Defense uses to finance its health care program for military retirees), and revolving funds (such as the Federal Employees Group Life Insurance fund). Although trust funds are designated as such by law, there is no substantive difference between them and the other types of funds.

Trust funds and other government funds that have receipts in excess of amounts needed for expenditures are credited with nonmarketable Treasury debt called government account series securities. At the end of fiscal year 2010, about \$4.5 trillion in such securities was outstanding, most of which was credited to the Social Security trust funds. The value of the outstanding securities serves as a measure of how much receipts, including the interest earned on those receipts, have exceeded outlays over time for the programs financed through those funds. Known as debt held by government accounts, that amount and the amount of debt held by the public (described in Chapter 1) compose two measures of the government's debt: gross federal debt and debt subject to limit.

### Trust Funds

The federal budget has a number of trust funds, although most of the money is credited to fewer than a dozen of them. The largest trust funds by far are the two for Social Security (the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance, or DI, Trust Fund), Medicare's Hospital Insurance (HI) Trust Fund, and the funds dedicated to programs for military and civilian retirement.

When a trust fund receives payroll taxes or other income that is not needed immediately to pay benefits or cover other expenses, the Treasury credits the fund and uses the excess cash to reduce the amount of new federal borrowing that is needed to finance the governmentwide deficit. That is, if other tax and spending policies are unchanged, the government borrows less from the public than it would in the absence of those excess funds. The reverse is the case when revenues for a trust fund program fall short of expenses. The balances of trust funds at a given point in time are not a measure of resources available to pay future obligations for the respective programs; those resources will need to come from federal revenues or additional borrowing in the years those obligations are due.

Including the cash receipts and expenditures of trust funds in the budget totals with receipts and expenditures of other federal programs is useful for assessing how all federal activities, taken together, affect the economy and financial markets. Therefore, the Congressional Budget Office (CBO), the Administration's Office of Management and Budget, and other fiscal analysts generally focus on the total deficit rather than on the deficit with or without particular trust funds. That comprehensive view of the government's fiscal activities is known as the "unified budget."

According to CBO's current baseline projection, trust funds as a group will run a surplus of \$95 billion in 2011 and a total surplus of \$1.7 trillion from 2012 through 2021 (see Table C-1). That surplus is bolstered by interest receipts and other sums transferred from elsewhere in the budget. Such intragovernmental transfers, which are projected to total \$644 billion in 2011, reallocate costs from one category of the budget to another but do not directly change the total deficit or the government's borrowing needs. If intragovernmental transfers are excluded

**Table C-1.****CBO's Baseline Projections of Surpluses or Deficits in the Trust Funds**

(Billions of dollars)

	Actual,												Total	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2011-2015	2011-2020
Social Security														
Old-Age and Survivors Insurance	103	99	111	116	117	121	125	122	115	106	93	81	563	1,206
Disability Insurance	-21	-27	-24	-28	-29	-30	-31	-33	-33	-33	-33	-36	-139	-337
Subtotal	82	72	87	88	87	90	94	90	83	73	60	45	424	868
Medicare														
Hospital Insurance (Part A)	-30	-40	-28	-30	-27	-21	-24	-22	-21	-28	-34	-41	-145	-316
Supplementary Medical Insurance (Part B)	9	-10	12	5	-3	-9	-22	-5	2	-1	3	10	-5	-18
Subtotal	-21	-50	-16	-25	-30	-30	-46	-27	-19	-29	-31	-31	-150	-333
Military Retirement	41	39	58	59	64	70	72	84	97	100	108	117	290	869
Civilian Retirement <sup>a</sup>	27	25	25	25	26	27	28	30	33	35	37	38	127	327
Unemployment Insurance	-1	12	5	-1	3	9	16	14	11	8	5	4	28	86
Highway and Mass Transit	11	-7	-14	-16	-17	-17	-16	-16	-16	-16	-17	-17	-70	-167
CLASS Trust Fund	0	0	6	9	10	12	12	9	8	7	6	6	37	84
Airport and Airways	-1	1	1	2	2	3	4	5	5	6	7	8	9	43
Other <sup>b</sup>	5	3	2	2	2	3	2	3	3	4	4	4	11	32
<b>Total Trust Fund Surplus</b>	<b>144</b>	<b>95</b>	<b>153</b>	<b>142</b>	<b>149</b>	<b>167</b>	<b>166</b>	<b>192</b>	<b>204</b>	<b>188</b>	<b>178</b>	<b>174</b>	<b>707</b>	<b>1,808</b>
Intragovernmental Transfers to Trust Funds <sup>c</sup>	613	644	653	668	690	724	773	832	882	957	1,022	1,096	3,379	8,941
<b>Total Trust Fund Deficit Excluding Intragovernmental Transfers</b>	<b>-470</b>	<b>-549</b>	<b>-500</b>	<b>-526</b>	<b>-541</b>	<b>-556</b>	<b>-607</b>	<b>-640</b>	<b>-679</b>	<b>-769</b>	<b>-844</b>	<b>-922</b>	<b>-2,672</b>	<b>-7,133</b>

Source: Congressional Budget Office.

Note: CLASS = Community Living Assistance Services and Support program.

- Includes Civil Service Retirement, Foreign Service Retirement, and several smaller retirement trust funds.
- Primarily trust funds for railroad workers' retirement, federal employees' health and life insurance, Superfund, and various insurance programs for veterans.
- Includes interest paid to trust funds, payments from the Treasury's general fund to the Supplementary Medical Insurance program and the Unemployment Trust Fund, the employer's share of payments for federal employees' retirement, lump-sum payments to the Civil Service and Military Retirement Trust Funds, taxes on Social Security benefits, and smaller miscellaneous payments.

and only income from sources outside the government (such as income from payroll taxes) is counted, the trust funds as a whole, in CBO's view, will run annual deficits that increase from \$549 billion in 2011 to \$922 billion in 2021.

Total trust fund surpluses are dominated by those for the Old-Age and Survivors Insurance portion of the Social Security program. Including interest and other intra-governmental payments, CBO estimates a surplus of \$99 billion for that fund this year and a cumulative surplus of about \$1.1 trillion from 2012 through 2021. For Social Security as a whole, the estimated surpluses peak at \$94 billion in 2016 and decline to \$45 billion in 2021

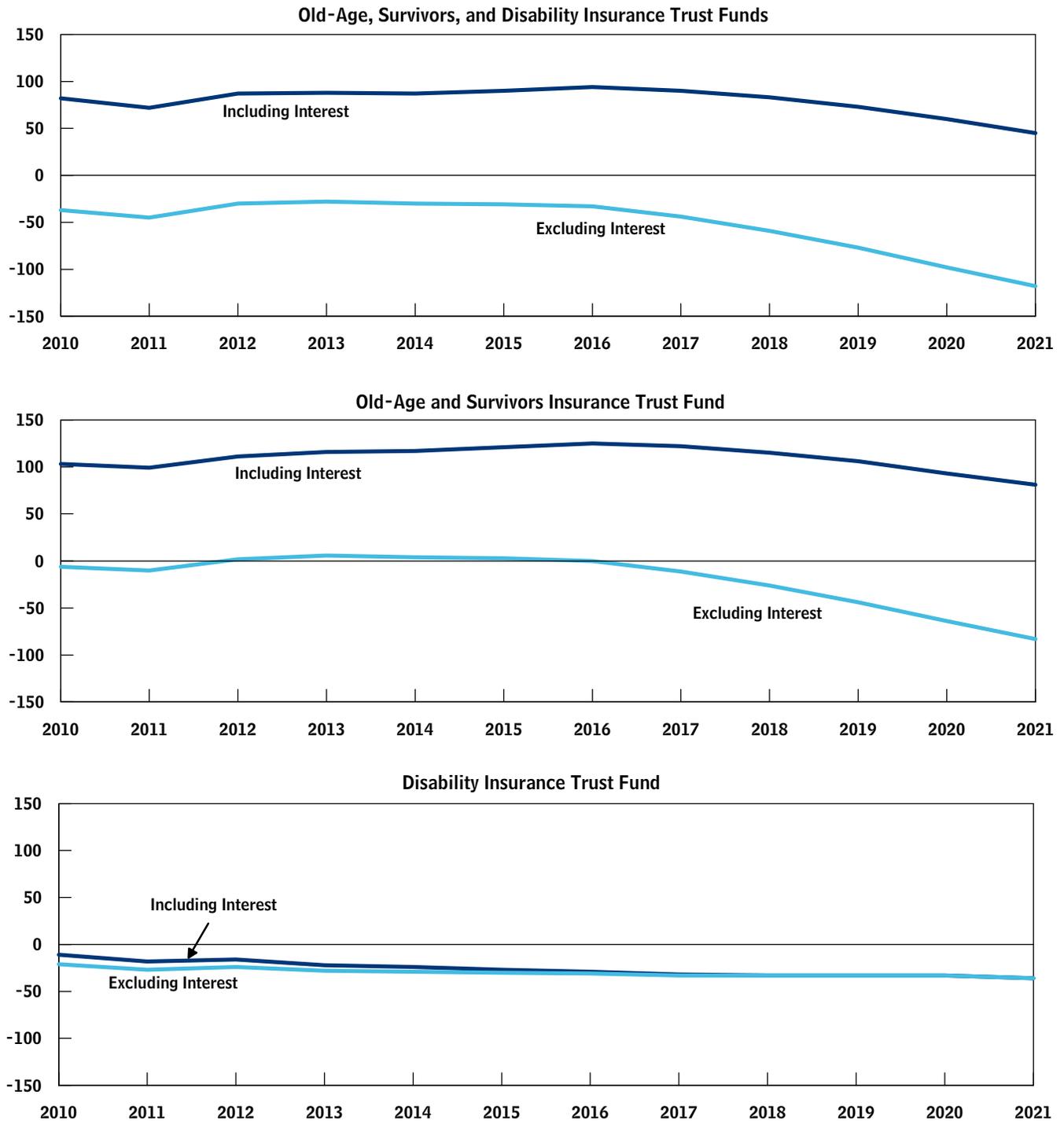
(see Figure C-1). Excluding interest, surpluses for Social Security become deficits of \$45 billion in 2011 and \$547 billion over the 2012–2021 period.

In the absence of legislative action, CBO projects, three major trust funds will exhaust their balances during the baseline period: the DI trust fund, the HI Trust Fund, and the Highway Trust Fund. In 2010, the DI and HI trust funds had negative cash flows, including the interest earned on invested securities, of \$21 billion and \$30 billion, respectively. In CBO's projection, the negative cash flows for the two funds continue throughout the baseline period; their balances are exhausted in 2017 (DI) and 2021 (HI).

**Figure C-1.**

**CBO’s Baseline Projections of Annual Surpluses or Deficits in the Social Security Trust Funds**

(Billions of dollars)



Source: Congressional Budget Office.

The Highway Trust Fund comprises two accounts—the highway account, which funds construction of highways and highway safety programs, and the transit account, which funds construction of mass transit. Depending on cash flows to the Highway Trust Fund, the two accounts will probably be unable to meet obligations in a timely manner sometime during 2012 (the highway account) and 2013 (the transit account). In 2009 and 2010, the Highway Trust Fund received transfers of \$7 billion and \$20 billion, respectively, to keep the trust fund solvent.

### Related Measures of Federal Debt

At the end of 2010, debt held by the public totaled approximately \$9.0 trillion. Under CBO's current baseline projections, that measure of debt will soar to \$18.3 trillion by the end of 2021. Debt held by the public is a straightforward measure for assessing the relationship between federal debt and the economy because it represents the amount that the government has borrowed in the financial markets to pay for its operations and activities; such borrowing competes with that of other participants in credit markets for financial resources.<sup>1</sup> In contrast, debt held by trust funds and other government accounts represents *internal* transactions of the government and thus has no direct effect on credit markets.

### Gross Federal Debt

Gross federal debt consists of debt held by the public and debt issued to government accounts. In CBO's projections, debt held by the public more than doubles from the end of 2010 to the end of 2021, and debt held by government accounts grows by more than 50 percent. (The latter increase mainly reflects the impact of the aggregate trust fund surpluses projected over the 2011–2021 period.) As a result of those large increases in its components, gross federal debt climbs in every year from 2011 to 2021, reaching \$25.1 trillion in 2021—roughly

85 percent more than its total of \$13.5 trillion at the end of 2010 (see Table C-2).

### Debt Subject to Limit

Debt subject to limit includes virtually all of gross federal debt. It excludes debt issued by agencies that the Treasury does not control; that debt (such as securities issued by the Tennessee Valley Authority) generally lacks the full faith and credit of the U.S. government. Debt subject to limit also excludes debt issued by Fannie Mae, Freddie Mac, and the Federal Financing Bank—an arm of the Treasury created in 1973 and authorized to issue up to \$15 billion of its own debt.

The current debt ceiling, set in February 2010 by the Statutory Pay-As-You-Go Act of 2010, is \$14.294 trillion.<sup>2</sup> Under current policies and assuming that the Treasury will not refinance securities associated with the Supplementary Financing Program in the upcoming months, CBO estimates that the ceiling will probably be reached in the spring.<sup>3</sup> At that point, barring Congressional action to raise the ceiling, the Treasury would have to stop issuing additional debt for a period of time and, instead, use alternative strategies for managing its cash and debt to fund government activities.

In the event of a delay in increasing the debt ceiling, the Treasury has various options for staying under the ceiling for a while. In the past, the Treasury has trimmed or delayed the sales of marketable securities, suspended the sales of nonmarketable securities, suspended the flows and redeemed securities of certain government accounts, and swapped debt with the Federal Financing Bank.<sup>4</sup> Given the very large federal deficit in 2011, such options will allow the government to continue operating for only a limited time without further borrowing.

1. Another useful measure of the federal government's financial position is debt net of financial assets, which subtracts from debt held by the public the value of financial assets (such as preferred stock) purchased from institutions participating in the Troubled Asset Relief Program, holdings of preferred stock in Fannie Mae and Freddie Mac, the Treasury's purchases of mortgage-backed securities, cash balances, and other financial instruments. For more information on the different measures of federal debt, see Congressional Budget Office, *Federal Debt and Interest Costs* (December 2010).

2. Public Law 111-139, Title 1, 124 Stat. 8.

3. The Supplementary Financing Program was established in September 2008 to help the Federal Reserve conduct monetary policy and stabilize the financial system during the financial crisis. The Treasury auctioned short-term bills as part of its normal operations and placed the cash raised into an account at the Federal Reserve. That account held more than \$550 billion at its peak in November 2008. At the end of 2010, the account balance was \$200 billion.

4. For more information, see Chapter 2 in Congressional Budget Office, *Federal Debt and Interest Costs*.

**Table C-2.****CBO's Baseline Projections of Federal Debt**

(Billions of dollars)

	Actual,											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Debt Held by the Public	9,018	10,430	11,598	12,386	12,996	13,625	14,358	15,064	15,767	16,557	17,392	18,253
Debt Held by Government Accounts												
Social Security	2,586	2,658	2,745	2,833	2,920	3,011	3,105	3,194	3,277	3,350	3,409	3,455
Other government accounts <sup>a</sup>	1,923	1,959	2,047	2,129	2,234	2,358	2,482	2,638	2,817	2,984	3,159	3,348
<b>Total</b>	<b>4,509</b>	<b>4,617</b>	<b>4,792</b>	<b>4,962</b>	<b>5,155</b>	<b>5,368</b>	<b>5,587</b>	<b>5,832</b>	<b>6,094</b>	<b>6,334</b>	<b>6,568</b>	<b>6,802</b>
Gross Federal Debt	13,527	15,047	16,389	17,347	18,150	18,993	19,944	20,896	21,861	22,890	23,960	25,056
Debt Subject to Limit <sup>b</sup>	13,511	15,032	16,375	17,333	18,137	18,980	19,932	20,884	21,849	22,879	23,949	25,046
<b>Memorandum:</b>												
Debt Held by the Public as a Percentage of GDP	62.1	69.4	73.9	75.5	75.3	74.9	75.0	75.2	75.3	75.8	76.2	76.7
Debt Held by the Public Net of Financial Assets <sup>c</sup>												
In billions of dollars	8,003	9,531	10,619	11,303	11,819	12,360	13,017	13,639	14,243	14,924	15,649	16,397
As a percentage of GDP	55.1	63.4	67.7	68.9	68.5	67.9	68.0	68.1	68.0	68.3	68.6	68.9

Source: Congressional Budget Office.

Note: GDP = gross domestic product.

- Mainly Civil Service Retirement and Disability, Military Retirement, Medicare, and Unemployment Insurance Trust Funds.
- Differs from the gross federal debt primarily because most debt issued by agencies other than the Treasury and the Federal Financing Bank is excluded from the debt limit. The current debt limit is \$14,294 billion.
- Subtracts the value of financial assets (such as preferred stock) purchased from institutions participating in the Troubled Asset Relief Program, purchases of mortgage-backed securities by the Treasury, cash holdings, and other financial instruments from debt held by the public.





## **CBO's Economic Projections for 2010 to 2021**

**T**he tables in this appendix expand on the information in Chapter 2 by showing the Congressional Budget Office's (CBO's) year-by-year economic projections for 2010 to 2021 (by calendar year in Table D-1 and by fiscal year in Table D-2). CBO does not forecast cyclical fluctuations in its projections for years after 2016. Instead, the

projected values shown in the tables for 2017 to 2021 reflect CBO's assessment of average values for that period. That assessment takes into account economic and demographic trends but does not attempt to forecast the frequency or size of fluctuations in the business cycle.

**Table D-1.****CBO's Year-by-Year Projections for Calendar Years 2010 to 2021**

	Estimated, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	<b>Year to Year (Percentage change)</b>											
Real GDP	2.8	2.7	3.1	3.1	3.5	3.8	3.0	2.5	2.4	2.4	2.4	2.3
PCE Price Index	1.8	1.3	1.2	1.4	1.6	1.7	1.9	2.0	2.0	2.0	2.0	2.0
Core PCE Price Index <sup>a</sup>	1.4	1.0	1.1	1.4	1.5	1.6	1.8	2.0	2.0	2.0	2.0	2.0
Consumer Price Index <sup>b</sup>	1.7	1.6	1.3	1.6	1.8	2.0	2.2	2.4	2.3	2.3	2.3	2.3
Core Consumer Price Index <sup>a</sup>	1.0	0.9	1.0	1.4	1.7	1.9	2.1	2.3	2.2	2.2	2.2	2.2
GDP Price Index	0.9	0.9	1.3	1.6	1.7	1.7	1.9	2.1	2.0	2.0	2.0	2.0
Nominal GDP	3.8	3.7	4.4	4.7	5.3	5.5	5.0	4.6	4.5	4.4	4.4	4.3
Employment Cost Index <sup>c</sup>	1.8	2.1	2.3	2.6	2.8	3.0	3.3	3.6	3.7	3.6	3.3	3.2
	<b>Calendar Year Average</b>											
Interest Rates (Percent)												
Three-month Treasury bill	0.1	0.3	1.1	2.5	3.5	4.0	4.3	4.4	4.4	4.4	4.4	4.4
Ten-year Treasury note	3.2	3.4	3.8	4.2	4.6	5.0	5.3	5.4	5.4	5.4	5.4	5.4
Unemployment Rate (Percent)	9.6	9.4	8.4	7.6	6.8	5.9	5.3	5.3	5.2	5.2	5.2	5.2
Nominal GDP (Billions of dollars)	14,649	15,184	15,858	16,609	17,483	18,441	19,362	20,258	21,162	22,093	23,062	24,064
Tax Bases (Billions of dollars)												
Domestic economic profits	1,234	1,308	1,355	1,422	1,433	1,469	1,515	1,521	1,541	1,554	1,601	1,658
Wages and salaries	6,403	6,702	7,070	7,377	7,832	8,281	8,710	9,109	9,543	9,982	10,417	10,865
Tax Bases (Percentage of GDP)												
Domestic economic profits	8.4	8.6	8.5	8.6	8.2	8.0	7.8	7.5	7.3	7.0	6.9	6.9
Wages and salaries	43.7	44.1	44.6	44.4	44.8	44.9	45.0	45.0	45.1	45.2	45.2	45.2

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve.

Notes: Percentage changes are measured from one year to the next.

GDP = gross domestic product; PCE = personal consumption expenditures.

- a. Excludes prices for food and energy.
- b. The consumer price index for all urban consumers.
- c. The employment cost index for wages and salaries of workers in private industry.

**Table D-2.****CBO's Year-by-Year Projections for Fiscal Years 2010 to 2021**

	Actual, 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	<b>Year to Year (Percentage change)</b>											
Real GDP	2.2	2.5	3.2	2.9	3.5	3.7	3.3	2.6	2.4	2.4	2.4	2.3
PCE Price Index	1.8	1.4	1.2	1.4	1.6	1.7	1.8	2.0	2.0	2.0	2.0	2.0
Core PCE Price Index <sup>a</sup>	1.6	1.0	1.0	1.3	1.5	1.6	1.7	1.9	2.0	2.0	2.0	2.0
Consumer Price Index <sup>b</sup>	1.7	1.6	1.3	1.5	1.8	2.0	2.2	2.4	2.4	2.3	2.3	2.3
Core Consumer Price Index <sup>a</sup>	1.2	0.9	1.0	1.3	1.7	1.8	2.0	2.3	2.3	2.2	2.2	2.2
GDP Price Index	0.8	1.0	1.1	1.5	1.7	1.6	1.8	2.0	2.0	2.0	2.0	2.0
Nominal GDP	2.9	3.6	4.4	4.5	5.2	5.4	5.2	4.7	4.5	4.4	4.4	4.4
Employment Cost Index <sup>c</sup>	1.5	2.3	2.1	2.5	2.8	2.9	3.2	3.5	3.6	3.7	3.3	3.2
	<b>Fiscal Year Average</b>											
Interest Rates (Percent)												
Three-month Treasury bill	0.1	0.2	0.8	2.2	3.3	3.9	4.2	4.4	4.4	4.4	4.4	4.4
Ten-year Treasury note	3.4	3.2	3.7	4.1	4.5	4.9	5.3	5.4	5.4	5.4	5.4	5.4
Unemployment Rate (Percent)	9.8	9.6	8.7	7.8	7.1	6.1	5.4	5.3	5.2	5.2	5.2	5.2
Nominal GDP (Billions of dollars)	14,513	15,034	15,693	16,400	17,258	18,195	19,141	20,033	20,935	21,856	22,817	23,810
Tax Bases (Billions of dollars)												
Domestic economic profits	1,183	1,294	1,346	1,405	1,429	1,456	1,508	1,518	1,538	1,547	1,589	1,644
Wages and salaries	6,351	6,618	6,957	7,307	7,724	8,166	8,608	9,009	9,430	9,874	10,306	10,752
Tax Bases (Percentage of GDP)												
Domestic economic profits	8.1	8.6	8.6	8.6	8.3	8.0	7.9	7.6	7.3	7.1	7.0	6.9
Wages and salaries	43.8	44.0	44.3	44.6	44.8	44.9	45.0	45.0	45.0	45.2	45.2	45.2

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve.

Notes: Percentage changes are measured from one year to the next.

GDP = gross domestic product; PCE = personal consumption expenditures.

- a. Excludes prices for food and energy.
- b. The consumer price index for all urban consumers.
- c. The employment cost index for wages and salaries of workers in private industry.



APPENDIX  
**E**

## Historical Budget Data

**T**his appendix provides historical data on revenues, outlays, and the deficit or surplus—in forms consistent with the projections in Chapters 1, 3, and 4—for fiscal years 1971 to 2010. The data are shown both in nominal dollars and as a percentage of gross domestic product. Data come from the Congressional Budget Office and the Office of Management and Budget. Some of the numbers have been revised since January 2010, the last time these tables were published.

Federal revenues, outlays, the deficit or surplus, and debt held by the public are shown in Tables E-1 and E-2. Revenues, outlays, and the deficit or surplus have both on-budget and off-budget components. Social Security's receipts and outlays were placed off-budget by the Balanced Budget and Emergency Deficit Control Act of 1985. For the sake of consistency, the tables show the budgetary components of Social Security as off-budget before that year. The Postal Service was moved off-budget by the Omnibus Reconciliation Act of 1989.

The major sources of federal revenues (including off-budget revenues) are presented in Tables E-3 and E-4. Social insurance taxes include payments by employers and employees for Social Security, Medicare, Railroad Retirement, and unemployment insurance, as well as pension contributions by federal workers. Excise taxes are levied on certain products and services, such as gasoline, alcoholic beverages, and air travel. Estate and gift taxes are levied on assets when they are transferred. Miscellaneous receipts consist of earnings of the Federal Reserve System and income from numerous fees and charges.

Total outlays for major categories of spending appear in Tables E-5 and E-6. (Those totals include on- and off-budget outlays.) Spending controlled by the appropriation process is classified as discretionary. Spending governed by permanent laws, such as those that set eligibility requirements for certain programs, is considered mandatory. Offsetting receipts include the government's contri-

butions to retirement programs for its employees, fees, charges (such as Medicare premiums), and receipts from the use of federally controlled land and offshore territory. Net interest (function 900 of the budget) is composed mostly of the interest paid by the government on federal debt offset by its interest income.

Tables E-7 and E-8 divide discretionary spending into its defense, international, and domestic components. Tables E-9 and E-10 classify mandatory spending by the three major entitlement programs—Social Security, Medicare, and Medicaid—and by other categories of mandatory spending. Income-security programs provide benefits to recipients with limited income and assets; those programs include unemployment compensation, Supplemental Security Income, and the Supplemental Nutrition Assistance Program. Other federal retirement and disability programs provide benefits to federal civilian employees, members of the military, and veterans. The category of other mandatory programs includes the activities of the Commodity Credit Corporation, the Medicare-Eligible Retiree Health Care Fund, the subsidy costs of federal student loan programs, the Children's Health Insurance Program, and programs related to the federal government's response to problems in the housing and financial markets.

Fluctuations in the budget deficit are influenced by legislation that governs taxation and spending and by the automatic responses of revenues and outlays to developments in the economy and other factors. One component of the latter group—the automatic stabilizers—reflects cyclical movements in real (inflation-adjusted) output and unemployment. During cyclical slowdowns and recessions, the economy grows more slowly than it could if it achieved its potential, and revenue growth declines automatically as well. In addition, some spending—for example, to pay unemployment insurance claims or to provide federal nutrition benefits—automatically increases. Those automatic reductions in revenues and

increases in outlays help to bolster the economy, but they also temporarily increase the budget deficit. The opposite occurs when there are upturns in the business cycle; that is, automatic stabilizers tend to shrink as the economy moves toward its potential output. The remaining tables, E-11 through E-13, show estimates of the budget deficit or surplus (and its outlay and revenue components) without the automatic stabilizers.

The budget balance without automatic stabilizers is an estimate of what the surplus or deficit would be if GDP was at its potential, the unemployment rate was at a corresponding level, and all other factors were unchanged. That measure helps analysts estimate the extent to which changes in the budget balance are caused by movements of the business cycle and thus are likely to prove temporary rather than long-lasting. Table E-11 also presents estimates of potential and actual gross domestic product.

**Table E-1.****Revenues, Outlays, Deficits, Surpluses, and Debt Held by the Public, 1971 to 2010, in Billions of Dollars**

	Revenues	Outlays	Deficit (-) or Surplus			Total	Debt Held by the Public <sup>a</sup>
			On-Budget	Social Security	Postal Service		
1971	187.1	210.2	-26.1	3.0	n.a.	-23.0	303.0
1972	207.3	230.7	-26.1	3.1	-0.4	-23.4	322.4
1973	230.8	245.7	-15.2	0.5	-0.2	-14.9	340.9
1974	263.2	269.4	-7.2	1.8	-0.8	-6.1	343.7
1975	279.1	332.3	-54.1	2.0	-1.1	-53.2	394.7
1976	298.1	371.8	-69.4	-3.2	-1.1	-73.7	477.4
1977	355.6	409.2	-49.9	-3.9	0.2	-53.7	549.1
1978	399.6	458.7	-55.4	-4.3	0.5	-59.2	607.1
1979	463.3	504.0	-39.6	-2.0	0.9	-40.7	640.3
1980	517.1	590.9	-73.1	-1.1	0.4	-73.8	711.9
1981	599.3	678.2	-73.9	-5.0	-0.1	-79.0	789.4
1982	617.8	745.7	-120.6	-7.9	0.6	-128.0	924.6
1983	600.6	808.4	-207.7	0.2	-0.3	-207.8	1,137.3
1984	666.4	851.8	-185.3	0.3	-0.4	-185.4	1,307.0
1985	734.0	946.3	-221.5	9.4	-0.1	-212.3	1,507.3
1986	769.2	990.4	-237.9	16.7	*	-221.2	1,740.6
1987	854.3	1,004.0	-168.4	19.6	-0.9	-149.7	1,889.8
1988	909.2	1,064.4	-192.3	38.8	-1.7	-155.2	2,051.6
1989	991.1	1,143.7	-205.4	52.4	0.3	-152.6	2,190.7
1990	1,032.0	1,253.0	-277.6	58.2	-1.6	-221.0	2,411.6
1991	1,055.0	1,324.2	-321.4	53.5	-1.3	-269.2	2,689.0
1992	1,091.2	1,381.5	-340.4	50.7	-0.7	-290.3	2,999.7
1993	1,154.3	1,409.4	-300.4	46.8	-1.4	-255.1	3,248.4
1994	1,258.6	1,461.8	-258.8	56.8	-1.1	-203.2	3,433.1
1995	1,351.8	1,515.7	-226.4	60.4	2.0	-164.0	3,604.4
1996	1,453.1	1,560.5	-174.0	66.4	0.2	-107.4	3,734.1
1997	1,579.2	1,601.1	-103.2	81.3	*	-21.9	3,772.3
1998	1,721.7	1,652.5	-29.9	99.4	-0.2	69.3	3,721.1
1999	1,827.5	1,701.8	1.9	124.7	-1.0	125.6	3,632.4
2000	2,025.2	1,789.0	86.4	151.8	-2.0	236.2	3,409.8
2001	1,991.1	1,862.8	-32.4	163.0	-2.3	128.2	3,319.6
2002	1,853.1	2,010.9	-317.4	159.0	0.7	-157.8	3,540.4
2003	1,782.3	2,159.9	-538.4	155.6	5.2	-377.6	3,913.4
2004	1,880.1	2,292.8	-568.0	151.1	4.1	-412.7	4,295.5
2005	2,153.6	2,472.0	-493.6	173.5	1.8	-318.3	4,592.2
2006	2,406.9	2,655.1	-434.5	185.2	1.1	-248.2	4,829.0
2007	2,568.0	2,728.7	-342.2	186.5	-5.1	-160.7	5,035.1
2008	2,524.0	2,982.5	-641.8	185.7	-2.4	-458.6	5,803.1
2009	2,105.0	3,517.7	-1,549.7	137.3	-0.3	-1,412.7	7,544.7
2010	2,161.7	3,455.8	-1,371.1	81.7	-4.7	-1,294.1	9,017.8

Sources: Congressional Budget Office; Office of Management and Budget.

Note: n.a. = not applicable; \* = between -\$50 million and \$50 million.

a. End of year.

**Table E-2.**

### Revenues, Outlays, Deficits, Surpluses, and Debt Held by the Public, 1971 to 2010, as a Percentage of Gross Domestic Product

	Revenues	Outlays	Deficit (-) or Surplus			Total	Debt Held by the Public <sup>a</sup>
			On-Budget	Social Security	Postal Service		
1971	17.3	19.5	-2.4	0.3	n.a.	-2.1	28.1
1972	17.6	19.6	-2.2	0.3	*	-2.0	27.4
1973	17.6	18.7	-1.2	*	*	-1.1	26.0
1974	18.3	18.7	-0.5	0.1	-0.1	-0.4	23.9
1975	17.9	21.3	-3.5	0.1	-0.1	-3.4	25.3
1976	17.1	21.4	-4.0	-0.2	-0.1	-4.2	27.5
1977	18.0	20.7	-2.5	-0.2	*	-2.7	27.8
1978	18.0	20.7	-2.5	-0.2	*	-2.7	27.4
1979	18.5	20.2	-1.6	-0.1	*	-1.6	25.6
1980	19.0	21.7	-2.7	*	*	-2.7	26.1
1981	19.6	22.2	-2.4	-0.2	*	-2.6	25.8
1982	19.2	23.1	-3.7	-0.2	*	-4.0	28.7
1983	17.5	23.5	-6.0	*	*	-6.0	33.1
1984	17.3	22.2	-4.8	*	*	-4.8	34.0
1985	17.7	22.8	-5.3	0.2	*	-5.1	36.4
1986	17.5	22.5	-5.4	0.4	*	-5.0	39.5
1987	18.4	21.6	-3.6	0.4	*	-3.2	40.6
1988	18.2	21.3	-3.8	0.8	*	-3.1	41.0
1989	18.4	21.2	-3.8	1.0	*	-2.8	40.6
1990	18.0	21.9	-4.8	1.0	*	-3.9	42.1
1991	17.8	22.3	-5.4	0.9	*	-4.5	45.3
1992	17.5	22.1	-5.5	0.8	*	-4.7	48.1
1993	17.5	21.4	-4.6	0.7	*	-3.9	49.3
1994	18.0	21.0	-3.7	0.8	*	-2.9	49.2
1995	18.4	20.6	-3.1	0.8	*	-2.2	49.1
1996	18.8	20.2	-2.3	0.9	*	-1.4	48.4
1997	19.2	19.5	-1.3	1.0	*	-0.3	45.9
1998	19.9	19.1	-0.3	1.1	*	0.8	43.0
1999	19.8	18.5	*	1.4	*	1.4	39.4
2000	20.6	18.2	0.9	1.5	*	2.4	34.7
2001	19.5	18.2	-0.3	1.6	*	1.3	32.5
2002	17.6	19.1	-3.0	1.5	*	-1.5	33.6
2003	16.2	19.7	-4.9	1.4	*	-3.4	35.6
2004	16.1	19.6	-4.9	1.3	*	-3.5	36.8
2005	17.3	19.9	-4.0	1.4	*	-2.6	36.9
2006	18.2	20.1	-3.3	1.4	*	-1.9	36.5
2007	18.5	19.6	-2.5	1.3	*	-1.2	36.2
2008	17.5	20.7	-4.5	1.3	*	-3.2	40.3
2009	14.9	25.0	-11.0	1.0	*	-10.0	53.5
2010	14.9	23.8	-9.4	0.6	*	-8.9	62.1

Sources: Congressional Budget Office; Office of Management and Budget.

Note: n.a. = not applicable; \* = between -0.05 percent and 0.05 percent.

a. End of year.

**Table E-3.****Revenues, by Major Source, 1971 to 2010, in Billions of Dollars**

	Individual Income Taxes	Corporate Income Taxes	Social Insurance Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscellaneous Receipts	Total Revenues
1971	86.2	26.8	47.3	16.6	3.7	2.6	3.9	187.1
1972	94.7	32.2	52.6	15.5	5.4	3.3	3.6	207.3
1973	103.2	36.2	63.1	16.3	4.9	3.2	3.9	230.8
1974	119.0	38.6	75.1	16.8	5.0	3.3	5.4	263.2
1975	122.4	40.6	84.5	16.6	4.6	3.7	6.7	279.1
1976	131.6	41.4	90.8	17.0	5.2	4.1	8.0	298.1
1977	157.6	54.9	106.5	17.5	7.3	5.2	6.5	355.6
1978	181.0	60.0	121.0	18.4	5.3	6.6	7.4	399.6
1979	217.8	65.7	138.9	18.7	5.4	7.4	9.3	463.3
1980	244.1	64.6	157.8	24.3	6.4	7.2	12.7	517.1
1981	285.9	61.1	182.7	40.8	6.8	8.1	13.8	599.3
1982	297.7	49.2	201.5	36.3	8.0	8.9	16.2	617.8
1983	288.9	37.0	209.0	35.3	6.1	8.7	15.6	600.6
1984	298.4	56.9	239.4	37.4	6.0	11.4	17.0	666.4
1985	334.5	61.3	265.2	36.0	6.4	12.1	18.5	734.0
1986	349.0	63.1	283.9	32.9	7.0	13.3	19.9	769.2
1987	392.6	83.9	303.3	32.5	7.5	15.1	19.5	854.3
1988	401.2	94.5	334.3	35.2	7.6	16.2	20.2	909.2
1989	445.7	103.3	359.4	34.4	8.7	16.3	23.2	991.1
1990	466.9	93.5	380.0	35.3	11.5	16.7	28.0	1,032.0
1991	467.8	98.1	396.0	42.4	11.1	15.9	23.6	1,055.0
1992	476.0	100.3	413.7	45.6	11.1	17.4	27.2	1,091.2
1993	509.7	117.5	428.3	48.1	12.6	18.8	19.4	1,154.3
1994	543.1	140.4	461.5	55.2	15.2	20.1	23.1	1,258.6
1995	590.2	157.0	484.5	57.5	14.8	19.3	28.5	1,351.8
1996	656.4	171.8	509.4	54.0	17.2	18.7	25.5	1,453.1
1997	737.5	182.3	539.4	56.9	19.8	17.9	25.4	1,579.2
1998	828.6	188.7	571.8	57.7	24.1	18.3	32.6	1,721.7
1999	879.5	184.7	611.8	70.4	27.8	18.3	34.9	1,827.5
2000	1,004.5	207.3	652.9	68.9	29.0	19.9	42.8	2,025.2
2001	994.3	151.1	694.0	66.2	28.4	19.4	37.7	1,991.1
2002	858.3	148.0	700.8	67.0	26.5	18.6	33.9	1,853.1
2003	793.7	131.8	713.0	67.5	22.0	19.9	34.5	1,782.3
2004	809.0	189.4	733.4	69.9	24.8	21.1	32.6	1,880.1
2005	927.2	278.3	794.1	73.1	24.8	23.4	32.7	2,153.6
2006	1,043.9	353.9	837.8	74.0	27.9	24.8	44.6	2,406.9
2007	1,163.5	370.2	869.6	65.1	26.0	26.0	47.5	2,568.0
2008	1,145.7	304.3	900.2	67.3	28.8	27.6	50.0	2,524.0
2009	915.3	138.2	890.9	62.5	23.5	22.5	52.1	2,105.0
2010	898.5	191.4	864.8	66.9	18.9	25.3	95.9	2,161.7

Sources: Congressional Budget Office; Office of Management and Budget.

**Table E-4.****Revenues, by Major Source, 1971 to 2010, as a Percentage of Gross Domestic Product**

	Individual Income Taxes	Corporate Income Taxes	Social Insurance Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscellaneous Receipts	Total Revenues
1971	8.0	2.5	4.4	1.5	0.3	0.2	0.4	17.3
1972	8.1	2.7	4.5	1.3	0.5	0.3	0.3	17.6
1973	7.9	2.8	4.8	1.2	0.4	0.2	0.3	17.6
1974	8.3	2.7	5.2	1.2	0.4	0.2	0.4	18.3
1975	7.8	2.6	5.4	1.1	0.3	0.2	0.4	17.9
1976	7.6	2.4	5.2	1.0	0.3	0.2	0.5	17.1
1977	8.0	2.8	5.4	0.9	0.4	0.3	0.3	18.0
1978	8.2	2.7	5.5	0.8	0.2	0.3	0.3	18.0
1979	8.7	2.6	5.6	0.7	0.2	0.3	0.4	18.5
1980	9.0	2.4	5.8	0.9	0.2	0.3	0.5	19.0
1981	9.4	2.0	6.0	1.3	0.2	0.3	0.5	19.6
1982	9.2	1.5	6.3	1.1	0.2	0.3	0.5	19.2
1983	8.4	1.1	6.1	1.0	0.2	0.3	0.5	17.5
1984	7.8	1.5	6.2	1.0	0.2	0.3	0.4	17.3
1985	8.1	1.5	6.4	0.9	0.2	0.3	0.4	17.7
1986	7.9	1.4	6.4	0.7	0.2	0.3	0.5	17.5
1987	8.4	1.8	6.5	0.7	0.2	0.3	0.4	18.4
1988	8.0	1.9	6.7	0.7	0.2	0.3	0.4	18.2
1989	8.3	1.9	6.7	0.6	0.2	0.3	0.4	18.4
1990	8.1	1.6	6.6	0.6	0.2	0.3	0.5	18.0
1991	7.9	1.7	6.7	0.7	0.2	0.3	0.4	17.8
1992	7.6	1.6	6.6	0.7	0.2	0.3	0.4	17.5
1993	7.7	1.8	6.5	0.7	0.2	0.3	0.3	17.5
1994	7.8	2.0	6.6	0.8	0.2	0.3	0.3	18.0
1995	8.0	2.1	6.6	0.8	0.2	0.3	0.4	18.4
1996	8.5	2.2	6.6	0.7	0.2	0.2	0.3	18.8
1997	9.0	2.2	6.6	0.7	0.2	0.2	0.3	19.2
1998	9.6	2.2	6.6	0.7	0.3	0.2	0.4	19.9
1999	9.6	2.0	6.6	0.8	0.3	0.2	0.4	19.8
2000	10.2	2.1	6.6	0.7	0.3	0.2	0.4	20.6
2001	9.7	1.5	6.8	0.6	0.3	0.2	0.4	19.5
2002	8.1	1.4	6.6	0.6	0.3	0.2	0.3	17.6
2003	7.2	1.2	6.5	0.6	0.2	0.2	0.3	16.2
2004	6.9	1.6	6.3	0.6	0.2	0.2	0.3	16.1
2005	7.5	2.2	6.4	0.6	0.2	0.2	0.3	17.3
2006	7.9	2.7	6.3	0.6	0.2	0.2	0.3	18.2
2007	8.4	2.7	6.3	0.5	0.2	0.2	0.3	18.5
2008	8.0	2.1	6.3	0.5	0.2	0.2	0.3	17.5
2009	6.5	1.0	6.3	0.4	0.2	0.2	0.4	14.9
2010	6.2	1.3	6.0	0.5	0.1	0.2	0.7	14.9

Sources: Congressional Budget Office; Office of Management and Budget.

**Table E-5.****Outlays for Major Categories of Spending, 1971 to 2010, in Billions of Dollars**

	Discretionary Spending	Mandatory Spending		Net Interest	Total Outlays
		Programmatic Spending <sup>a</sup>	Offsetting Receipts		
1971	122.5	86.9	-14.1	14.8	210.2
1972	128.5	100.8	-14.1	15.5	230.7
1973	130.4	116.0	-18.0	17.3	245.7
1974	138.2	130.9	-21.2	21.4	269.4
1975	158.0	169.5	-18.3	23.2	332.3
1976	175.6	189.1	-19.6	26.7	371.8
1977	197.1	203.7	-21.5	29.9	409.2
1978	218.7	227.4	-22.8	35.5	458.7
1979	240.0	247.0	-25.6	42.6	504.0
1980	276.3	291.3	-29.2	52.5	590.9
1981	307.9	339.4	-37.9	68.8	678.2
1982	326.0	370.8	-36.0	85.0	745.7
1983	353.3	410.6	-45.3	89.8	808.4
1984	379.4	405.6	-44.2	111.1	851.8
1985	415.8	448.2	-47.1	129.5	946.3
1986	438.5	461.8	-45.9	136.0	990.4
1987	444.2	474.2	-52.9	138.6	1,004.0
1988	464.4	505.1	-56.8	151.8	1,064.4
1989	488.8	546.1	-60.1	169.0	1,143.7
1990	500.6	625.6	-57.5	184.3	1,253.0
1991	533.3	701.9	-105.4	194.4	1,324.2
1992	533.8	717.8	-69.4	199.3	1,381.5
1993	539.8	741.4	-70.5	198.7	1,409.4
1994	541.3	789.1	-71.5	202.9	1,461.8
1995	544.8	818.1	-79.3	232.1	1,515.7
1996	532.7	857.8	-71.1	241.1	1,560.5
1997	547.0	896.0	-85.9	244.0	1,601.1
1998	552.0	943.1	-83.7	241.1	1,652.5
1999	572.1	979.5	-79.6	229.8	1,701.8
2000	614.6	1,032.6	-81.2	222.9	1,789.0
2001	649.0	1,097.2	-89.5	206.2	1,862.8
2002	734.0	1,196.6	-90.6	170.9	2,010.9
2003	824.3	1,283.8	-101.3	153.1	2,159.9
2004	895.1	1,347.3	-109.7	160.2	2,292.8
2005	968.5	1,448.2	-128.7	184.0	2,472.0
2006	1,016.6	1,553.1	-141.3	226.6	2,655.1
2007	1,041.6	1,628.4	-178.4	237.1	2,728.7
2008	1,134.9	1,780.9	-186.0	252.8	2,982.5
2009	1,237.5	2,283.3	-190.1	186.9	3,517.7
2010	1,349.2	2,093.7	-184.1	196.9	3,455.8

Sources: Congressional Budget Office; Office of Management and Budget.

a. Excludes offsetting receipts.

**Table E-6.****Outlays for Major Categories of Spending, 1971 to 2010, as a Percentage of Gross Domestic Product**

	Discretionary Spending	Mandatory Spending		Net Interest	Total Outlays
		Programmatic Spending <sup>a</sup>	Offsetting Receipts		
1971	11.3	8.1	-1.3	1.4	19.5
1972	10.9	8.6	-1.2	1.3	19.6
1973	9.9	8.9	-1.4	1.3	18.7
1974	9.6	9.1	-1.5	1.5	18.7
1975	10.1	10.9	-1.2	1.5	21.3
1976	10.1	10.9	-1.1	1.5	21.4
1977	10.0	10.3	-1.1	1.5	20.7
1978	9.9	10.3	-1.0	1.6	20.7
1979	9.6	9.9	-1.0	1.7	20.2
1980	10.1	10.7	-1.1	1.9	21.7
1981	10.1	11.1	-1.2	2.3	22.2
1982	10.1	11.5	-1.1	2.6	23.1
1983	10.3	11.9	-1.3	2.6	23.5
1984	9.9	10.5	-1.2	2.9	22.2
1985	10.0	10.8	-1.1	3.1	22.8
1986	10.0	10.5	-1.0	3.1	22.5
1987	9.5	10.2	-1.1	3.0	21.6
1988	9.3	10.1	-1.1	3.0	21.3
1989	9.1	10.1	-1.1	3.1	21.2
1990	8.7	10.9	-1.0	3.2	21.9
1991	9.0	11.8	-1.8	3.3	22.3
1992	8.6	11.5	-1.1	3.2	22.1
1993	8.2	11.3	-1.1	3.0	21.4
1994	7.8	11.3	-1.0	2.9	21.0
1995	7.4	11.1	-1.1	3.2	20.6
1996	6.9	11.1	-0.9	3.1	20.2
1997	6.7	10.9	-1.0	3.0	19.5
1998	6.4	10.9	-1.0	2.8	19.1
1999	6.2	10.6	-0.9	2.5	18.5
2000	6.3	10.5	-0.8	2.3	18.2
2001	6.3	10.7	-0.9	2.0	18.2
2002	7.0	11.3	-0.9	1.6	19.1
2003	7.5	11.7	-0.9	1.4	19.7
2004	7.7	11.5	-0.9	1.4	19.6
2005	7.8	11.6	-1.0	1.5	19.9
2006	7.7	11.7	-1.1	1.7	20.1
2007	7.5	11.7	-1.3	1.7	19.6
2008	7.9	12.4	-1.3	1.8	20.7
2009	8.8	16.2	-1.3	1.3	25.0
2010	9.3	14.4	-1.3	1.4	23.8

Sources: Congressional Budget Office; Office of Management and Budget.

a. Excludes offsetting receipts.

**Table E-7.****Discretionary Outlays, 1971 to 2010, in Billions of Dollars**

	Defense	International	Domestic	Total
1971	79.0	3.8	39.7	122.5
1972	79.3	4.6	44.6	128.5
1973	77.1	4.8	48.5	130.4
1974	80.7	6.2	51.3	138.2
1975	87.6	8.2	62.2	158.0
1976	89.9	7.5	78.2	175.6
1977	97.5	8.0	91.6	197.1
1978	104.6	8.5	105.6	218.7
1979	116.8	9.1	114.1	240.0
1980	134.6	12.8	128.9	276.3
1981	158.0	13.6	136.3	307.9
1982	185.9	12.9	127.2	326.0
1983	209.9	13.6	129.8	353.3
1984	228.0	16.3	135.1	379.4
1985	253.1	17.4	145.3	415.8
1986	273.8	17.7	147.0	438.5
1987	282.5	15.2	146.5	444.2
1988	290.9	15.7	157.8	464.4
1989	304.0	16.6	168.2	488.8
1990	300.1	19.1	181.4	500.6
1991	319.7	19.7	193.9	533.3
1992	302.6	19.2	212.0	533.8
1993	292.4	21.6	225.8	539.8
1994	282.3	20.8	238.2	541.3
1995	273.6	20.1	251.1	544.8
1996	266.0	18.3	248.4	532.7
1997	271.7	18.9	256.4	547.0
1998	270.2	18.2	263.6	552.0
1999	275.5	19.5	277.1	572.1
2000	295.0	21.2	298.4	614.6
2001	306.1	22.5	320.4	649.0
2002	349.0	26.2	358.8	734.0
2003	405.0	27.8	391.5	824.3
2004	454.1	33.8	407.2	895.1
2005	493.6	39.0	435.9	968.5
2006	520.0	35.9	460.7	1,016.6
2007	547.9	34.9	458.8	1,041.6
2008	612.4	37.4	485.1	1,134.9
2009	656.8	43.0	537.7	1,237.5
2010	689.1	45.9	614.2	1,349.2

Sources: Congressional Budget Office; Office of Management and Budget.

**Table E-8.****Discretionary Outlays, 1971 to 2010, as a Percentage of Gross Domestic Product**

	Defense	International	Domestic	Total
1971	7.3	0.3	3.7	11.3
1972	6.7	0.4	3.8	10.9
1973	5.9	0.4	3.7	9.9
1974	5.6	0.4	3.6	9.6
1975	5.6	0.5	4.0	10.1
1976	5.2	0.4	4.5	10.1
1977	4.9	0.4	4.6	10.0
1978	4.7	0.4	4.8	9.9
1979	4.7	0.4	4.6	9.6
1980	4.9	0.5	4.7	10.1
1981	5.2	0.4	4.5	10.1
1982	5.8	0.4	3.9	10.1
1983	6.1	0.4	3.8	10.3
1984	5.9	0.4	3.5	9.9
1985	6.1	0.4	3.5	10.0
1986	6.2	0.4	3.3	10.0
1987	6.1	0.3	3.1	9.5
1988	5.8	0.3	3.1	9.3
1989	5.6	0.3	3.1	9.1
1990	5.2	0.3	3.2	8.7
1991	5.4	0.3	3.3	9.0
1992	4.8	0.3	3.4	8.6
1993	4.4	0.3	3.4	8.2
1994	4.0	0.3	3.4	7.8
1995	3.7	0.3	3.4	7.4
1996	3.4	0.2	3.2	6.9
1997	3.3	0.2	3.1	6.7
1998	3.1	0.2	3.0	6.4
1999	3.0	0.2	3.0	6.2
2000	3.0	0.2	3.0	6.3
2001	3.0	0.2	3.1	6.3
2002	3.3	0.2	3.4	7.0
2003	3.7	0.3	3.6	7.5
2004	3.9	0.3	3.5	7.7
2005	4.0	0.3	3.5	7.8
2006	3.9	0.3	3.5	7.7
2007	3.9	0.3	3.3	7.5
2008	4.3	0.3	3.4	7.9
2009	4.7	0.3	3.8	8.8
2010	4.7	0.3	4.2	9.3

Sources: Congressional Budget Office; Office of Management and Budget.

**Table E-9.****Outlays for Mandatory Spending, 1971 to 2010, in Billions of Dollars**

	Social Security	Medicare	Medicaid	Income Security <sup>a</sup>	Other Retirement and Disability	Other Programs	Offsetting Receipts	Total
1971	35.1	7.5	3.4	13.4	14.5	13.1	-14.1	72.9
1972	39.4	8.4	4.6	16.4	16.2	15.8	-14.1	86.7
1973	48.2	9.0	4.6	14.5	18.5	21.3	-18.0	98.0
1974	55.0	10.7	5.8	17.4	20.9	21.2	-21.2	109.8
1975	63.6	14.1	6.8	28.9	26.4	29.6	-18.3	151.1
1976	72.7	16.9	8.6	37.6	27.7	25.6	-19.6	169.5
1977	83.7	20.8	9.9	34.6	31.2	23.6	-21.5	182.2
1978	92.4	24.3	10.7	32.1	33.9	34.0	-22.8	204.5
1979	102.6	28.2	12.4	32.2	38.7	32.9	-25.6	221.4
1980	117.1	34.0	14.0	44.3	44.4	37.6	-29.2	262.1
1981	137.9	41.3	16.8	49.9	50.8	42.6	-37.9	301.5
1982	153.9	49.2	17.4	53.2	55.0	42.1	-36.0	334.7
1983	168.5	55.5	19.0	64.0	58.0	45.6	-45.3	365.3
1984	176.1	61.1	20.1	51.7	59.8	36.8	-44.2	361.3
1985	186.4	69.7	22.7	52.3	61.0	56.2	-47.1	401.0
1986	196.5	74.2	25.0	54.2	63.4	48.4	-45.9	415.9
1987	205.1	79.9	27.4	55.0	66.5	40.2	-52.9	421.2
1988	216.8	85.7	30.5	57.3	71.1	43.7	-56.8	448.2
1989	230.4	93.2	34.6	62.9	57.3	67.7	-60.1	485.9
1990	246.5	107.0	41.1	68.7	60.0	102.2	-57.5	568.1
1991	266.8	114.2	52.5	87.0	64.4	117.0	-105.4	596.5
1992	285.2	129.4	67.8	110.9	66.5	58.0	-69.4	648.4
1993	302.0	143.2	75.8	121.7	68.4	30.2	-70.5	670.9
1994	316.9	159.6	82.0	118.6	72.3	39.6	-71.5	717.6
1995	333.3	177.1	89.1	117.2	75.3	26.2	-79.3	738.8
1996	347.1	191.3	92.0	121.7	77.3	28.4	-71.1	786.7
1997	362.3	207.9	95.6	122.5	80.6	27.2	-85.9	810.1
1998	376.1	211.0	101.2	122.1	83.0	49.7	-83.7	859.4
1999	387.0	209.3	108.0	129.0	85.7	60.5	-79.6	899.9
2000	406.0	216.0	117.9	133.9	88.1	70.5	-81.2	951.5
2001	429.4	237.9	129.4	143.1	93.0	64.5	-89.5	1,007.6
2002	452.1	253.7	147.5	180.4	96.1	66.9	-90.6	1,106.0
2003	470.5	274.2	160.7	196.2	99.9	82.4	-101.3	1,182.5
2004	491.5	297.2	176.2	190.6	104.0	87.6	-109.7	1,237.5
2005	518.7	332.6	181.7	196.9	111.8	106.4	-128.7	1,319.5
2006	543.9	373.6	180.6	200.1	113.5	141.5	-141.3	1,411.9
2007	581.4	436.0	190.6	203.2	122.9	94.3	-178.4	1,450.0
2008	612.1	456.0	201.4	260.7	129.4	121.2	-186.0	1,594.8
2009	677.7	499.0	250.9	350.3	138.2	367.2	-190.1	2,093.3
2010	700.7	520.4	272.8	437.7	138.9	23.3	-184.1	1,909.6

Sources: Congressional Budget Office; Office of Management and Budget.

- a. Includes unemployment compensation, Supplemental Security Income, the refundable portion of the earned income and child tax credits, the Supplemental Nutrition Assistance Program, family support, child nutrition, and foster care.

**Table E-10.****Outlays for Mandatory Spending, 1971 to 2010, as a Percentage of Gross Domestic Product**

	Social Security	Medicare	Medicaid	Income Security <sup>a</sup>	Other Retirement and Disability	Other Programs	Offsetting Receipts	Total
1971	3.3	0.7	0.3	1.2	1.3	1.2	-1.3	6.7
1972	3.3	0.7	0.4	1.4	1.4	1.3	-1.2	7.4
1973	3.7	0.7	0.4	1.1	1.4	1.6	-1.4	7.5
1974	3.8	0.7	0.4	1.2	1.4	1.5	-1.5	7.6
1975	4.1	0.9	0.4	1.9	1.7	1.9	-1.2	9.7
1976	4.2	1.0	0.5	2.2	1.6	1.5	-1.1	9.8
1977	4.2	1.1	0.5	1.8	1.6	1.2	-1.1	9.2
1978	4.2	1.1	0.5	1.4	1.5	1.5	-1.0	9.2
1979	4.1	1.1	0.5	1.3	1.5	1.3	-1.0	8.9
1980	4.3	1.2	0.5	1.6	1.6	1.4	-1.1	9.6
1981	4.5	1.4	0.6	1.6	1.7	1.4	-1.2	9.9
1982	4.8	1.5	0.5	1.7	1.7	1.3	-1.1	10.4
1983	4.9	1.6	0.6	1.9	1.7	1.3	-1.3	10.6
1984	4.6	1.6	0.5	1.3	1.6	1.0	-1.2	9.4
1985	4.5	1.7	0.5	1.3	1.5	1.4	-1.1	9.7
1986	4.5	1.7	0.6	1.2	1.4	1.1	-1.0	9.4
1987	4.4	1.7	0.6	1.2	1.4	0.9	-1.1	9.1
1988	4.3	1.7	0.6	1.1	1.4	0.9	-1.1	8.9
1989	4.3	1.7	0.6	1.2	1.1	1.3	-1.1	9.0
1990	4.3	1.9	0.7	1.2	1.0	1.8	-1.0	9.9
1991	4.5	1.9	0.9	1.5	1.1	2.0	-1.8	10.1
1992	4.6	2.1	1.1	1.8	1.1	0.9	-1.1	10.4
1993	4.6	2.2	1.2	1.8	1.0	0.5	-1.1	10.2
1994	4.5	2.3	1.2	1.7	1.0	0.6	-1.0	10.3
1995	4.5	2.4	1.2	1.6	1.0	0.4	-1.1	10.1
1996	4.5	2.5	1.2	1.6	1.0	0.4	-0.9	10.2
1997	4.4	2.5	1.2	1.5	1.0	0.3	-1.0	9.9
1998	4.3	2.4	1.2	1.4	1.0	0.6	-1.0	9.9
1999	4.2	2.3	1.2	1.4	0.9	0.7	-0.9	9.8
2000	4.1	2.2	1.2	1.4	0.9	0.7	-0.8	9.7
2001	4.2	2.3	1.3	1.4	0.9	0.6	-0.9	9.9
2002	4.3	2.4	1.4	1.7	0.9	0.6	-0.9	10.5
2003	4.3	2.5	1.5	1.8	0.9	0.8	-0.9	10.8
2004	4.2	2.5	1.5	1.6	0.9	0.8	-0.9	10.6
2005	4.2	2.7	1.5	1.6	0.9	0.9	-1.0	10.6
2006	4.1	2.8	1.4	1.5	0.9	1.1	-1.1	10.7
2007	4.2	3.1	1.4	1.5	0.9	0.7	-1.3	10.4
2008	4.3	3.2	1.4	1.8	0.9	0.8	-1.3	11.1
2009	4.8	3.5	1.8	2.5	1.0	2.6	-1.3	14.8
2010	4.8	3.6	1.9	3.0	1.0	0.2	-1.3	13.2

Sources: Congressional Budget Office; Office of Management and Budget.

- a. Includes unemployment compensation, Supplemental Security Income, the refundable portion of the earned income and child tax credits, the Supplemental Nutrition Assistance Program, family support, child nutrition, and foster care.

**Table E-11.****Deficits, Surpluses, Debt, and Related Series, 1971 to 2010**

	Billions of Dollars			Percentage of Potential GDP			Gross Domestic Product (Billions of dollars)	
	Deficit (-) or Surplus	Budget Deficit (-) or Surplus Without Automatic Stabilizers	Debt Held by the Public	Deficit (-) or Surplus	Budget Deficit (-) or Surplus Without Automatic Stabilizers	Debt Held by the Public	Actual <sup>a</sup>	Potential
1971	-23	-19	303	-2.1	-1.7	27.7	1,080	1,094
1972	-23	-22	322	-2.0	-1.9	27.3	1,177	1,181
1973	-15	-27	341	-1.2	-2.2	26.8	1,311	1,272
1974	-6	-17	344	-0.4	-1.2	24.4	1,438	1,411
1975	-53	-35	395	-3.3	-2.2	24.4	1,560	1,617
1976	-74	-51	477	-4.1	-2.9	26.7	1,738	1,791
1977	-54	-41	549	-2.7	-2.1	27.4	1,974	2,000
1978	-59	-61	607	-2.7	-2.8	27.5	2,217	2,209
1979	-41	-52	640	-1.6	-2.1	25.9	2,501	2,473
1980	-74	-59	712	-2.7	-2.1	25.7	2,724	2,771
1981	-79	-54	789	-2.5	-1.7	25.4	3,057	3,113
1982	-128	-62	925	-3.7	-1.8	27.0	3,224	3,419
1983	-208	-120	1,137	-5.7	-3.3	30.9	3,441	3,677
1984	-185	-152	1,307	-4.7	-3.9	33.3	3,844	3,926
1985	-212	-195	1,507	-5.1	-4.7	36.0	4,146	4,187
1986	-221	-210	1,741	-5.0	-4.7	39.3	4,404	4,428
1987	-150	-135	1,890	-3.2	-2.9	40.3	4,651	4,690
1988	-155	-162	2,052	-3.1	-3.2	41.1	5,008	4,990
1989	-153	-175	2,191	-2.9	-3.3	41.0	5,399	5,342
1990	-221	-235	2,412	-3.9	-4.1	42.3	5,734	5,706
1991	-269	-213	2,689	-4.4	-3.5	44.1	5,930	6,091
1992	-290	-216	3,000	-4.5	-3.4	46.8	6,242	6,414
1993	-255	-195	3,248	-3.8	-2.9	48.3	6,587	6,729
1994	-203	-163	3,433	-2.9	-2.3	48.6	6,977	7,062
1995	-164	-134	3,604	-2.2	-1.8	48.6	7,341	7,423
1996	-107	-74	3,734	-1.4	-0.9	47.9	7,718	7,796
1997	-22	-25	3,772	-0.3	-0.3	46.1	8,212	8,192
1998	69	32	3,721	0.8	0.4	43.4	8,663	8,575
1999	126	38	3,632	1.4	0.4	40.4	9,208	8,994
2000	236	98	3,410	2.5	1.0	35.9	9,821	9,503
2001	128	49	3,320	1.3	0.5	32.9	10,225	10,086
2002	-158	-137	3,540	-1.5	-1.3	33.4	10,544	10,602
2003	-378	-311	3,913	-3.4	-2.8	35.1	10,980	11,149
2004	-413	-386	4,296	-3.5	-3.3	36.6	11,686	11,733
2005	-318	-331	4,592	-2.6	-2.7	37.0	12,446	12,398
2006	-248	-289	4,829	-1.9	-2.2	36.8	13,225	13,123
2007	-161	-185	5,035	-1.2	-1.3	36.4	13,892	13,851
2008	-459	-425	5,803	-3.2	-2.9	40.0	14,394	14,513
2009	-1,413	-1,100	7,545	-9.4	-7.3	50.2	14,098	15,020
2010	-1,294	-935	9,018	-8.4	-6.1	58.6	14,513	15,397

Sources: Congressional Budget Office (CBO); Department of Commerce, Bureau of Economic Analysis; Office of Management and Budget.

Note: The estimates of the automatic stabilizers and related measures differ from those reported by CBO in May 2010 because of revisions to estimates of potential gross domestic product and the natural rate of unemployment and because of technical changes to the calculations of the responses of the federal budget to the business cycle. For CBO's previous estimates, see Congressional Budget Office, *The Effects of the Automatic Stabilizers on the Federal Budget* (May 2010).

a. CBO calculated fiscal year numbers from seasonally adjusted quarterly national income and product account data from the Bureau of Economic Analysis.

**Table E-12.****The Budget Deficit or Surplus With and Without Automatic Stabilizers, 1971 to 2010, in Billions of Dollars**

	Budget Deficit (-) or Surplus With		-	Budget Deficit (-) or Surplus Without		Budget Revenues and Outlays Without Automatic Stabilizers		
	Automatic Stabilizers			Automatic Stabilizers	=	Automatic Stabilizers	Revenues	Outlays
1971	-23			-4			191	210
1972	-23			-1			209	231
1973	-15			12			220	247
1974	-6			11			254	272
1975	-53			-18			294	329
1976	-74			-22			315	366
1977	-54			-13			365	406
1978	-59			2			398	459
1979	-41			11			454	506
1980	-74			-15			530	588
1981	-79			-25			620	673
1982	-128			-66			674	736
1983	-208			-87			676	796
1984	-185			-33			698	850
1985	-212			-17			748	943
1986	-221			-11			777	987
1987	-150			-15			869	1,004
1988	-155			6			905	1,067
1989	-153			23			971	1,147
1990	-221			14			1,019	1,255
1991	-269			-56			1,104	1,318
1992	-290			-75			1,155	1,371
1993	-255			-61			1,207	1,402
1994	-203			-41			1,296	1,458
1995	-164			-30			1,382	1,516
1996	-107			-34			1,485	1,559
1997	-22			3			1,578	1,602
1998	69			37			1,690	1,658
1999	126			88			1,745	1,708
2000	236			138			1,896	1,797
2001	128			79			1,916	1,867
2002	-158			-21			1,864	2,001
2003	-378			-66			1,839	2,150
2004	-413			-27			1,902	2,288
2005	-318			13			2,141	2,472
2006	-248			41			2,371	2,660
2007	-161			24			2,550	2,735
2008	-459			-34			2,552	2,977
2009	-1,413			-312			2,356	3,456
2010	-1,294			-359			2,454	3,389

Sources: Congressional Budget Office (CBO); Office of Management and Budget.

Note: The estimates of the automatic stabilizers and related measures differ from those reported by CBO in May 2010 because of revisions to estimates of potential gross domestic product and the natural rate of unemployment and because of technical changes to the calculations of the responses of the federal budget to the business cycle. For CBO's previous estimates, see Congressional Budget Office, *The Effects of the Automatic Stabilizers on the Federal Budget* (May 2010).

**Table E-13.**

### The Budget Deficit or Surplus With and Without Automatic Stabilizers, 1971 to 2010, as a Percentage of Gross Domestic Product

	Budget Deficit (-) or Surplus With	-	Automatic	=	Budget Deficit (-) or Surplus Without	Budget Revenues and Outlays Without Automatic Stabilizers	
	Automatic Stabilizers		Stabilizers		Automatic Stabilizers	Revenues	Outlays
1971	-2.1		-0.4		-1.7	17.5	19.2
1972	-2.0		-0.1		-1.9	17.7	19.5
1973	-1.2		1.0		-2.2	17.3	19.5
1974	-0.4		0.8		-1.2	18.0	19.3
1975	-3.3		-1.1		-2.2	18.2	20.4
1976	-4.1		-1.2		-2.9	17.6	20.5
1977	-2.7		-0.6		-2.1	18.2	20.3
1978	-2.7		0.1		-2.8	18.0	20.8
1979	-1.6		0.5		-2.1	18.3	20.5
1980	-2.7		-0.5		-2.1	19.1	21.2
1981	-2.5		-0.8		-1.7	19.9	21.6
1982	-3.7		-1.9		-1.8	19.7	21.5
1983	-5.7		-2.4		-3.3	18.4	21.7
1984	-4.7		-0.8		-3.9	17.8	21.7
1985	-5.1		-0.4		-4.7	17.9	22.5
1986	-5.0		-0.2		-4.7	17.5	22.3
1987	-3.2		-0.3		-2.9	18.5	21.4
1988	-3.1		0.1		-3.2	18.1	21.4
1989	-2.9		0.4		-3.3	18.2	21.5
1990	-3.9		0.2		-4.1	17.9	22.0
1991	-4.4		-0.9		-3.5	18.1	21.6
1992	-4.5		-1.2		-3.4	18.0	21.4
1993	-3.8		-0.9		-2.9	17.9	20.8
1994	-2.9		-0.6		-2.3	18.3	20.6
1995	-2.2		-0.4		-1.8	18.6	20.4
1996	-1.4		-0.4		-0.9	19.0	20.0
1997	-0.3		*		-0.3	19.3	19.6
1998	0.8		0.4		0.4	19.7	19.3
1999	1.4		1.0		0.4	19.4	19.0
2000	2.5		1.4		1.0	19.9	18.9
2001	1.3		0.8		0.5	19.0	18.5
2002	-1.5		-0.2		-1.3	17.6	18.9
2003	-3.4		-0.6		-2.8	16.5	19.3
2004	-3.5		-0.2		-3.3	16.2	19.5
2005	-2.6		0.1		-2.7	17.3	19.9
2006	-1.9		0.3		-2.2	18.1	20.3
2007	-1.2		0.2		-1.3	18.4	19.7
2008	-3.2		-0.2		-2.9	17.6	20.5
2009	-9.4		-2.1		-7.3	15.7	23.0
2010	-8.4		-2.3		-6.1	15.9	22.0

Sources: Congressional Budget Office (CBO); Office of Management and Budget.

Notes: The estimates of the automatic stabilizers and related measures differ from those reported by CBO in May 2010 because of revisions to estimates of potential gross domestic product and the natural rate of unemployment and because of technical changes to the calculations of the responses of the federal budget to the business cycle. For CBO's previous estimates, see Congressional Budget Office, *The Effects of the Automatic Stabilizers on the Federal Budget* (May 2010).

\* = between zero and 0.05 percent.





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# Glossary

**T**his glossary defines economic and budgetary terms as they apply to *The Budget and Economic Outlook: Fiscal Years 2011 to 2021*; it also acts as a general reference for readers. In some cases, the entries sacrifice technical precision for the sake of brevity and clarity. Where appropriate, entries note the sources of data for economic variables as follows:

- BEA refers to the Bureau of Economic Analysis in the Department of Commerce,
- BLS refers to the Bureau of Labor Statistics in the Department of Labor,
- CBO refers to the Congressional Budget Office,
- FRB refers to the Board of Governors of the Federal Reserve System, and
- NBER refers to the National Bureau of Economic Research (a private entity).

**A****ccrual accounting:** A method of accounting that records expenses when they are incurred and revenues when they are earned rather than when payments are made or received. See **Federal Credit Reform Act of 1990**, **financing account**, and **outlays**. Compare with **cash accounting**.

**adjusted gross income (AGI):** All income that is subject to taxation under the individual income tax after “above-the-line” deductions for such things as alimony payments and certain contributions to individual retirement accounts. Personal exemptions and the standard or itemized deductions are subtracted from AGI to determine taxable income. See **effective tax rate**.

**advance appropriation:** Budget authority provided in an appropriation act that is first available for obligation in a fiscal year after the year for which the appropriation was enacted. The amount of the advance appropriation is included in the budget totals for the year in which it will become available. See **appropriation act**, **budget authority**, **fiscal year**, and **obligation**; compare with **forward funding**, **obligation delay**, and **unobligated balances**.

**aggregate demand:** Total purchases by consumers, businesses, governments, and foreigners of a country’s output of final goods and services during a given period. (BEA) See **deflation**, **monetary policy**, and **natural rate of unemployment**; compare with **domestic demand**.

**AGI:** See **adjusted gross income**.

**alternative minimum tax (AMT):** A tax intended to limit the extent to which higher-income people can reduce their tax liability (the amount they owe) through the use of preferences in the tax code. Taxpayers subject to the AMT are required to recalculate their tax liability on the basis of a more limited set of exemptions, deductions, and tax credits than would normally apply. The amount by which a taxpayer’s AMT calculation exceeds his or her regular tax calculation is that person’s AMT liability. See **Jobs and Growth Tax Relief Reconciliation Act of 2003** and **Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010**.

**American Recovery and Reinvestment Act of 2009 (ARRA, Public Law 111-5):** This law was intended to boost aggregate demand in response to the recession that began at the end of 2007. It provided appropriations for a variety of federal programs and increased or extended some benefits from Medicaid, unemployment

compensation, and nutrition assistance programs, among others. ARRA also reduced individual and corporate income taxes and made other changes to tax law.

**AMT:** See **alternative minimum tax**.

**appropriation act:** A law or legislation under the jurisdiction of the House and Senate Committees on Appropriations that provides authority for federal programs or agencies to incur obligations and make payments from the Treasury. Each year, the Congress considers regular appropriation acts, which fund the operations of the federal government for the upcoming fiscal year. The Congress may also consider supplemental, deficiency, or continuing appropriation acts (joint resolutions that provide budget authority for a fiscal year until the regular appropriation for that year is enacted). See **advance appropriation, authorization act, budget authority, budget resolution, contract authority, direct spending, discretionary spending, discretionary spending limits, entitlement, fiscal year, obligation, obligation delay, and obligation limitation**.

**ARRA:** See **American Recovery and Reinvestment Act of 2009**.

**asset-backed security:** A financial security whose payments are derived solely from the cash flows of an underlying asset, such as a pool of mortgages or student loans.

**asset bubble:** An economic development in which the price of a class of physical or financial assets (such as houses or securities) rises to a level that appears to be unsustainable and well above the assets' value as determined by economic fundamentals. Bubbles typically occur when investors purchase assets with the expectation of short-term gains because of rapidly rising prices. The increase in prices continues until investors' sentiment changes, often resulting in a sharp decline in demand and in asset prices.

**authorization act:** A law or legislation under the jurisdiction of a committee other than the House and Senate Committees on Appropriations that establishes or continues the operation of a federal program or agency, either indefinitely or for a specified period. An authorization act may suggest the budget authority

needed to fund the program or agency, which is then provided in a future appropriation act. However, for some programs, the authorization itself may provide the budget authority. See **appropriation act, budget authority, budget resolution, and obligation limitation**.

**automatic stabilizers:** Provisions in law that decrease revenues and increase expenditures when the economy goes into a recession (and vice versa when the economy expands) without requiring any new action on the part of the government. Stabilizers tend to reduce the depth of recessions and dampen expansions.

**B**alanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177): Referred to in CBO's reports as the Deficit Control Act, it also has been known as Gramm-Rudman-Hollings. Among other changes to the budget process, the law established rules that governed the calculation of CBO's baseline. In addition, it set specific deficit targets as well as procedures for sequestration to reduce spending if those targets were exceeded. The targets were changed to discretionary spending limits and pay-as-you-go (PAYGO) controls by the Budget Enforcement Act of 1990. However, the discretionary spending limits and the sequestration procedure to enforce them expired on September 30, 2002. PAYGO and its sequestration procedure were rendered ineffective on December 2, 2002, when P.L. 107-312 reduced all PAYGO balances to zero. The remaining provisions, including the rules that govern the calculation of the baseline, expired on September 30, 2006. CBO, however, continues to follow the methodology prescribed in the law for establishing baselines. See **baseline, Budget Enforcement Act of 1990, Congressional Budget Act of 1974, discretionary spending limits, pay-as-you-go, and sequestration**.

**baseline:** A benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending. As defined in the Deficit Control Act, the baseline is the projection of new budget authority, outlays, revenues, and the deficit or surplus into the budget year and out-years on the basis of current laws and policies, calculated following the rules set forth in

section 257 of that law. Section 257 expired in September 2006, but CBO continues to prepare baselines following the methodology prescribed in that section. Estimates consistent with section 257 are used by the House and Senate Committees on the Budget in implementing the pay-as-you-go rules in each House and are required for estimates under the Statutory Pay-As-You-Go Act of 2010. See **Balanced Budget and Emergency Deficit Control Act of 1985, budget authority, deficit, fiscal year, outlays, pay-as-you-go, revenues, Statutory Pay-As-You-Go Act of 2010, and surplus.**

**basis point:** One one-hundredth of a percentage point. (For example, the difference between interest rates of 5.5 percent and 5.0 percent is 50 basis points.)

**Blue Chip consensus forecast:** The average of about 50 private-sector economic forecasts compiled and published monthly by Aspen Publishers.

**budget authority:** Authority provided by law to incur financial obligations that will result in immediate or future outlays of federal government funds. Budget authority may be provided in an appropriation act or authorization act and may take the form of a direct appropriation of funds from the Treasury, borrowing authority, contract authority, entitlement authority, or authority to obligate and expend offsetting collections or receipts. Offsetting collections and receipts are classified as negative budget authority. See **advance appropriation, appropriation act, authorization act, baseline, budgetary resources, budget function, contract authority, direct spending, discretionary spending, discretionary spending limits, entitlement, forward funding, obligation delay, obligation limitation, offsetting collections and offsetting receipts, outlays, trust fund, and unobligated balances.**

**Budget Enforcement Act of 1990:** Among other changes to the budget process, this law established discretionary spending limits and pay-as-you-go controls by amending the Balanced Budget and Emergency Deficit Control Act of 1985. See **Balanced Budget and Emergency Deficit Control Act of 1985, discretionary spending limits, and pay-as-you-go.**

**budget function:** One of 20 general-subject categories into which budgetary resources are grouped so that all budget authority and outlays can be presented according to the national interests being addressed. There are 17 broad budget functions, including national defense, international affairs, energy, agriculture, health, income security, and general government. Three other functions—net interest, allowances, and undistributed offsetting receipts—are included to complete the budget. See **budget authority, net interest, offsetting collections and offsetting receipts, and outlays.**

**budget resolution:** A concurrent resolution (adopted by both Houses of Congress) that sets forth a Congressional budget plan for the budget year and at least four out-years. The plan consists of targets for spending and revenues; subsequent appropriation acts and authorization acts that affect revenues or direct spending are expected to comply with those targets. The targets are enforced in each House of Congress through procedural mechanisms set forth in law and in the rules of each House. See **appropriation act, authorization act, direct spending, fiscal year, reconciliation, and revenues.**

**budget year:** See **fiscal year, sequestration, and Statutory Pay-As-You-Go Act of 2010.**

**budgetary resources:** All sources of authority provided to federal agencies that permit them to incur financial obligations, including new budget authority, unobligated balances, direct spending authority, and obligation limitations. See **budget authority, direct spending, obligation limitation, sequestration, Statutory Pay-As-You-Go Act of 2010, and unobligated balances.**

**business cycle:** Fluctuations in overall business activity accompanied by swings in the unemployment rate, interest rates, and corporate profits. Over a business cycle, real activity rises to a peak (its highest level during the cycle) and then falls until it reaches a trough (its lowest level following the peak), whereupon it starts to rise again, defining a new cycle. Business cycles are irregular, varying in frequency, magnitude, and duration. (NBER) See **cyclical deficit or surplus, cyclically adjusted budget deficit or surplus, expansion, real, recession, recovery, and unemployment rate.**

**business fixed investment:** Spending by businesses on structures, equipment, and software. Such investment is labeled “fixed” to distinguish it from investment in inventories. See **inventories**.

**C****apacity utilization rate:** The seasonally adjusted output of the nation’s factories, mines, and electric and gas utilities expressed as a percentage of their capacity to produce output. A facility’s capacity is the greatest output it can maintain with a normal work pattern. (FRB)

**capital:** Tangible and intangible resources that can be used or invested to produce a stream of benefits over time. *Physical capital*—also known as *fixed capital* or the *capital stock*—consists of land and the stock of products set aside to support future production and consumption, including business inventories and *capital goods* (residential and nonresidential structures and producers’ durable equipment). *Human capital* is the education, training, work experience, and other attributes that enhance the ability of the labor force to produce goods and services. The *capital* of a business is the sum advanced and put at risk by the business’s owners: For example, *bank capital* is the sum put at risk by the owners of a bank. In an accounting sense, capital is a business’s net worth or equity—the difference between its assets and liabilities. *Financial capital* is wealth held in the form of financial instruments (such as stocks, bonds, and mortgages) rather than held directly in the form of physical capital. See **gross investment, investment, net federal government saving,** and **net national saving**.

**capital gains and losses:** The increase or decrease in the value of an asset that comes from the increase or decrease in the asset’s market price after its purchase. A capital gain or loss is “realized” when the asset is sold. See **capital income** and **net national saving**.

**capital income:** Income that is derived from capital, such as stock dividends, realized capital gains, an owner’s profits from a business, or the interest paid to holders of debt. See **capital gains and losses;** compare with **labor income**.

**capital services:** A measure of how much the stock of physical capital contributes to the flow of production. See **productivity**.

**cash accounting:** A method of accounting that records revenues when they are actually received (rather than when they are earned) and outlays when payments are made (rather than when expenses are incurred). See **Federal Credit Reform Act of 1990** and **outlays;** compare with **accrual accounting**.

**central bank:** A government-established agency responsible for conducting monetary policy and overseeing credit conditions. The Federal Reserve System fulfills those functions in the United States. See **Federal Reserve System** and **monetary policy**.

**central tendency:** The range of economic projections, truncated to exclude the three highest and the three lowest projections, made by members of the Board of Governors of the Federal Reserve System and the presidents of the Federal Reserve Banks. Those projections are published twice a year in the minutes of the Federal Open Market Committees meetings and twice a year in the Federal Reserve’s *Monetary Policy Report*.

**COLA:** See **cost-of-living adjustment**.

**commercial paper:** A short-term money market security, generally sold by large financial institutions or corporations to raise funds. Commercial paper is sometimes backed by collateral or guaranteed by a bank, but more typically it is backed by the good faith of the issuer.

**compensation:** All of the income due to an employee for his or her work during a given period. In addition to wages, salaries, bonuses, and stock options, compensation includes fringe benefits and the employer’s share of payroll taxes for social insurance programs, such as Social Security. (BEA) See **employment**.

**Congressional Budget Act of 1974:** The short title for Titles I–IX of the Congressional Budget and Impoundment Control Act of 1974, as amended (2 U.S.C. §§ 601–661). The act established a process through which the Congress could systematically

consider the total spending policy of the United States and determine priorities for allocating budgetary resources. The process calls for procedures for coordinating Congressional revenue and spending decisions made in separate tax, appropriations, and legislative measures. It established the House and Senate Budget Committees, the Congressional Budget Office, and the requirements for adopting concurrent resolutions on the budget and the reconciliation process. See **Balanced Budget and Emergency Deficit Control Act of 1985, credit reform, and Unfunded Mandates Reform Act of 1995.**

**conservatorship:** The legal process by which an external entity (in the case of Fannie Mae and Freddie Mac, the federal government) establishes control and oversight of a company to put it in a sound and solvent condition. See **Fannie Mae, Freddie Mac, and government-sponsored enterprise.**

**constant dollar:** A measure of spending or revenues in a given year that has been adjusted for differences in prices (such as inflation) between that year and a base year. See **inflation** and **real**; compare with **current dollar** and **nominal.**

**consumer confidence:** An index of consumer optimism that is based on surveys of consumers' attitudes about current and future economic conditions. One such measure, the consumer sentiment index, is constructed by the University of Michigan's Survey Research Center. The Conference Board constructs a similar measure, the consumer confidence index.

**consumer durable goods:** Products that are designed for use by consumers and that have an average life of at least three years. Examples include automobiles and major household appliances.

**consumer price index (CPI):** An index of the cost of living commonly used to measure inflation. The Bureau of Labor Statistics publishes the CPI-U, an index of consumer prices based on the typical market basket of goods and services consumed by all urban consumers, and the CPI-W, an index of consumer prices based on the typical market basket of goods and services consumed by urban wage earners and clerical workers. (BLS) See **core inflation, deflation, inflation, price index for personal**

**consumption expenditures, and Treasury inflation-protected security.**

**consumer sentiment index:** See **consumer confidence.**

**consumption:** In principle, the value of goods and services purchased and used up during a given period by households and governments. In practice, the Bureau of Economic Analysis counts purchases of many long-lasting goods (such as cars and clothes) as consumption even though the goods are not used up. Consumption by households alone is also called *personal consumption expenditures* or *consumer spending*. See **gross domestic product, national income and product accounts, price index for personal consumption expenditures, and private saving.**

**contract authority:** Authority provided by law to enter into contracts or incur other obligations in advance of, or in excess of, funds available for that purpose. Although it is a form of budget authority, contract authority does not provide the funds to make payments. Those funds must be provided later, usually in a subsequent appropriation act (called a liquidating appropriation). Contract authority differs from a federal agency's inherent authority to enter into contracts, which may be exercised only within the limits of available appropriations. See **appropriation act, budget authority, and obligation.**

**core inflation:** A measure of the rate of inflation that excludes changes in the prices of food and energy. See **consumer price index, inflation, and price index for personal consumption expenditures.**

**cost-of-living adjustment (COLA):** An annual increase in payments to reflect inflation.

**counterparty:** Either party, but usually referencing the *other* party, that enters into a contract or participates in a financial transaction. Within the financial services sector, *counterparty* can refer to a broker, investment bank, or other securities dealer that serves as the contracting party when completing an "over-the-counter" securities transaction. The term is generally used in that context in relation to *counterparty risk*—the risk of monetary loss that a firm may be exposed to if the counterparty to an over-the-counter securities trade has difficulty meeting its obligations under the terms of the transaction.

**CPI:** See **consumer price index**.

**credit default swap:** An insurance contract on a credit instrument, such as a bond or loan, under which one party (the buyer) makes a series of premium payments to another party (the seller) and receives a payoff from the seller if the credit instrument goes into default.

**credit reform:** A system of budgeting and accounting for federal credit activities that focuses on the cost of the subsidies conveyed in federal credit assistance. The system was established by the Federal Credit Reform Act of 1990 and took effect at the beginning of fiscal year 1992. See **Congressional Budget Act of 1974, credit subsidy, Federal Credit Reform Act of 1990, financing account, liquidating account, outlays, and program account**.

**credit subsidy:** The estimated long-term cost to the federal government of a direct loan or loan guarantee. That cost is calculated on a net-present-value basis, using interest rates on Treasury securities as the discount rate, and excludes federal administrative costs and any incidental effects on revenues or outlays. For direct loans, the subsidy cost is the net present value of loan disbursements minus repayments of interest and principal, adjusted for estimated defaults (net of recoveries), prepayments, fees, and penalties. For loan guarantees, the subsidy cost is the net present value of estimated payments by the government to cover defaults and delinquencies, interest subsidies, or other payments, offset by any payments to the government, including origination and other fees, penalties, and recoveries. See **credit reform, financing account, outlays, present value, and program account**.

**current-account balance:** A summary measure of a country's current transactions with the rest of the world, including net exports, net unilateral transfers, and net factor income (primarily the capital income from foreign property received by residents of a country offset by the capital income from property in that country flowing to residents of foreign countries). (BEA) See **net exports**.

**current dollar:** A measure of spending or revenues in a given year that has not been adjusted for differences in prices (such as inflation) between that year and a base

year. See **inflation** and **nominal**; compare with **constant dollar** and **real**.

**current year:** The fiscal year in progress. See **fiscal year**.

**cyclical deficit or surplus:** The part of the federal budget deficit or surplus that results from the business cycle. The cyclical component reflects the way in which the deficit or surplus automatically increases or decreases during economic expansions or recessions. (CBO) See **business cycle, deficit, expansion, recession, and surplus**; compare with **cyclically adjusted budget deficit or surplus**.

**cyclically adjusted budget deficit or surplus:** The federal budget deficit or surplus that would occur under current law if the influence of the business cycle was removed—that is, if the economy operated at potential gross domestic product. (CBO) See **business cycle, deficit, potential gross domestic product, and surplus**; compare with **cyclical deficit or surplus**.

**Debt:** In the case of the federal government, the total value of outstanding bills, notes, bonds, and other debt instruments issued by the Treasury and other federal agencies. *Debt held by the public* consists primarily of securities that the Treasury issues to raise cash to fund the operations and pay off the maturing liabilities of the federal government that tax revenues are insufficient to cover. Such debt is held by outside investors, including the Federal Reserve System. Other measures include *debt held by government accounts* (debt issued for internal government transactions, to trust funds and other federal accounts, and not traded in capital markets), *gross federal debt* (the sum of debt held by the public and debt held by government accounts), and *debt subject to limit* (which is subject to a statutory ceiling that applies to gross federal debt, with the exception of a small portion of the debt issued by the Treasury and the small amount of debt issued by other federal agencies, such as the Tennessee Valley Authority and the Postal Service). Securities issued by Fannie Mae and Freddie Mac are not included in any of those measures of debt. See **fiscal policy, gross debt, means of financing, net interest, and outlays**.

**debt service:** Payment of scheduled interest obligations on outstanding debt. As used in *The Budget and Economic Outlook*, debt service refers to a change in interest payments resulting from a change in estimates of the deficit or surplus. See **deficit**, **net interest**, and **surplus**.

**deficit:** The amount by which the federal government's total outlays exceed its total revenues in a given period, typically a fiscal year. See **baseline**, **cyclical deficit or surplus**, **cyclically adjusted budget deficit or surplus**, **debt service**, **fiscal year**, **means of financing outlays**, **net interest**, **pay-as-you-go**, **revenues**, and **Statutory Pay-As-You-Go Act of 2010**; compare with **surplus**.

**Deficit Control Act:** See **Balanced Budget and Emergency Deficit Control Act of 1985**.

**deflation:** A persistent drop in prices that is so broadly based that general indexes of prices, such as the consumer price index, register continuing declines. Deflation is usually caused by a collapse in aggregate demand. See **aggregate demand** and **consumer price index**.

**demand:** See **aggregate demand** and **domestic demand**.

**deposit insurance:** The guarantee by a federal agency that an individual depositor at a participating depository institution will receive the full amount of the deposit (currently up to \$250,000) if the institution becomes insolvent.

**depreciation:** A decline in the value of a currency, financial asset, or capital good. When applied to a capital good, depreciation usually refers to loss of value because of obsolescence, wear, or destruction (as by fire or flood) and is also called *consumption of fixed capital*. *Tax depreciation* is the depreciation that the tax code allows businesses to deduct when they calculate their taxable profits. It typically occurs more rapidly than *economic depreciation*, which is the actual decline in the value of an asset. Both measures of depreciation appear as part of the national income and product accounts. See **domestic economic profits**, **gross investment**, **national income and product accounts**, and **net national saving**.

**devaluation:** The act of a government to lower the fixed exchange rate of its currency. The government maintains a fixed exchange rate by buying and selling its currency at

that rate. It implements a devaluation by announcing that it will henceforth buy or sell its currency only at a new, lower exchange rate, which means that it will pay more of its currency for a given amount of foreign currency than it did before the devaluation. See **exchange rate**.

**direct spending:** Synonymous with *mandatory spending*, direct spending is the budget authority provided by laws other than appropriation acts and the outlays that result from that budget authority. (As used in *The Budget and Economic Outlook*, direct spending refers only to the outlays that result from budget authority provided in laws other than appropriation acts.) See **appropriation act**, **budgetary resources**, **budget authority**, **budget resolution**, **obligation limitation**, **outlays**, **pay-as-you-go**, **reconciliation**, **sequestration**, **Statutory Pay-As-You-Go Act of 2010**; compare with **discretionary spending** and **entitlement**.

**discount rate:** The interest rate that the Federal Reserve System charges on a loan it makes to a bank through its so-called discount window. Such loans, when allowed, enable a bank to meet its reserve requirements without reducing its lending. Alternatively, the discount rate is the interest rate used to compute the present value of future payments (such as for pension plans). See **Federal Reserve System**, **monetary policy**, **monetary stimulus**, and **present value**.

**discouraged workers:** Jobless people who are available for work but not actively seeking it because they think they have poor prospects of finding a job. Discouraged workers are not included in measures of the labor force or the unemployment rate. (BLS) See **labor force** and **unemployment rate**.

**discretionary spending:** The budget authority that is provided and controlled by appropriation acts and the outlays that result from that budget authority. See **appropriation act**, **budget authority**, **discretionary spending limits**, **obligation limitation**, and **reconciliation**; compare with **direct spending**.

**discretionary spending limits (or caps):** Statutory ceilings imposed on the amount of budget authority provided in appropriation acts in a fiscal year and on the outlays that are made in that year. The limits originally

were established in the Budget Enforcement Act of 1990. Under that law, if the estimated budget authority provided in all appropriation acts for a fiscal year (or the outlays resulting from that budget authority) exceeded the spending limit for that year, a sequestration—a cancellation of budget authority provided for programs funded by appropriation acts—would be triggered. All discretionary spending limits and the sequestration procedure to enforce them expired on September 30, 2002. See **appropriation act, Balanced Budget and Emergency Deficit Control Act of 1985, budget authority, Budget Enforcement Act of 1990, discretionary spending, fiscal year, outlays, and sequestration.**

**disposable personal income:** Personal income—the income that people receive, including transfer payments—minus the taxes and fees that people pay to governments. (BEA) See **personal saving** and **transfer payments.**

**domestic demand:** Total purchases of final goods and services, regardless of their origin, by U.S. consumers, businesses, and governments during a given period. Domestic demand equals gross domestic product minus net exports. (BEA) See **gross domestic product** and **net exports;** compare with **aggregate demand.**

**domestic economic profits:** Corporations' domestic profits, adjusted to remove distortions in depreciation allowances caused by tax rules and to exclude the effect of inflation on the value of inventories. Corporate domestic economic profits exclude certain income of U.S.-based multinational corporations that is derived from foreign sources, most of which does not generate corporate income tax receipts in the United States. Domestic economic profits are among the best measures of domestic profits from current production. Economic profits are referred to as *corporate profits with inventory valuation and capital consumption adjustments* in the national income and product accounts. (BEA) See **depreciation, inflation, inventories, and national income and product accounts.**

**E** **CI:** See **employment cost index.**

**Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA, Public Law 107-16):** Legislation that significantly reduced tax liabilities (the amount of tax owed) between 2001 and 2010 by cutting individual income tax rates, increasing the child tax credit, repealing estate taxes, raising deductions for married couples who file joint returns, increasing tax benefits for pensions and individual retirement accounts, and creating additional tax benefits for education. EGTRRA phased in many of those changes, including some that just became fully effective in 2010. Although initially slated to expire on or before December 31, 2010, many of the law's provisions have been extended temporarily or made permanent. For legislation that modified provisions of EGTRRA, see **Jobs and Growth Tax Relief Reconciliation Act of 2003** and **Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.**

**economic stimulus:** Federal fiscal or monetary policies aimed at promoting economic activity, used primarily during recessions. Such policies include reductions in taxes, increases in federal spending, reductions in interest rates, and other support for financial markets and institutions. See **fiscal stimulus** and **monetary stimulus.**

**effective tax rate:** The ratio of taxes paid to a given tax base. For individual income taxes, the effective tax rate is typically expressed as the ratio of taxes paid to adjusted gross income. For corporate income taxes, it is the ratio of taxes paid to domestic economic profits. For some purposes—such as calculating an overall tax rate on all income—an effective tax rate is computed on a base that includes the untaxed portion of Social Security benefits, interest on tax-exempt bonds, and similar items. It can also be computed on a base of personal income as measured by the national income and product accounts. The effective tax rate is a useful measure because the tax code's various exemptions, credits, deductions, and tax rates make actual ratios of taxes paid to income different from statutory tax rates. See **adjusted gross income;** compare with **marginal tax rate** and **statutory tax rate.**

**EGTRRA:** See **Economic Growth and Tax Relief Reconciliation Act of 2001.**

**Emergency Economic Stabilization Act of 2008**

**(Public Law 110-343, Division A):** The law that created the Troubled Asset Relief Program to purchase and insure some types of assets, thus promoting stability in financial markets. See **Troubled Asset Relief Program**.

**emergency liquidity facilities:** Programs the Federal Reserve established in response to the 2008–2009 financial crisis to provide short-term loans to financial institutions. Such lending helped avert the distressed sale of assets that could have caused some institutions to become insolvent or enter bankruptcy.

**employment:** Work performed or services rendered in exchange for compensation. Two estimates of employment are commonly used. One comes from the so-called establishment survey of employers (the Department of Labor’s Current Employment Statistics Survey), which measures employment as the estimated number of nonfarm wage and salary jobs. (Thus, a person with more than one job may be counted more than once.) The other estimate comes from the so-called household survey (the Census Bureau’s Current Population Survey), which measures employment as the estimated number of people employed. (Thus, someone with more than one job is counted only once.) The establishment survey covers only people on the payrolls of nonagricultural establishments, whereas the broader household survey includes self-employed workers, agricultural workers, unpaid workers in family-owned businesses, and employees of private households. However, the household survey is based on a smaller sample than the establishment survey is and therefore yields a more volatile estimate of employment. See **compensation** and **unemployment rate**.

**employment cost index (ECI):** An index of the weighted-average cost of an hour of labor—comprising the cost to the employer of wage and salary payments, employee benefits, and payroll taxes for social insurance programs, such as Social Security. The ECI is structured so that it is not affected by changes in the mix of occupations in the labor force or the mix of employment by industry. (BLS)

**entitlement:** A legal obligation of the federal government to make payments to a person, group of people, business, unit of government, or similar entity that meets the eligibility criteria set in law and for which the budget

authority is not provided in advance in an appropriation act. Spending for entitlement programs is controlled through those programs’ eligibility criteria and benefit or payment rules. The best-known entitlements are the government’s major benefit programs, such as Social Security and Medicare. See **appropriation act** and **budget authority**; compare with **direct spending**.

**establishment survey:** See employment.

**estate and gift taxes:** A linked set of federal taxes on estates, gifts, and generation-skipping transfers to tax the transfer of wealth from one generation to the next and to limit the extent to which wealth can be given away during life to avoid taxation at death.

**euro zone:** The area comprising those member states of the European Union (EU) in which the euro has been adopted as the single currency and in which a single monetary policy is conducted under the responsibility of the European Central Bank. Also known as the *euro area*. (Several other countries use the euro as well, but they are not members of the EU. In addition, some members of the EU are not part of the euro zone.) The euro is the world’s second largest reserve currency—and the second most-traded currency—after the U.S. dollar.

**exchange rate:** The number of units of a currency that can be bought with one unit of another currency—for example, the number of euros that can be purchased with one dollar. See **devaluation**.

**excise tax:** A tax levied on the purchase of a specific type of good or service, such as tobacco products or air transportation services.

**expansion:** A phase of the business cycle that begins when gross domestic product exceeds its previous peak and extends until gross domestic product reaches its next peak. (NBER) See **business cycle**, **cyclical deficit or surplus**, and **gross domestic product**.

**expenditure account:** An account established within federal funds and trust funds to record appropriations, obligations, and outlays (as well as offsetting collections) that are usually financed from an associated receipt account. See **federal funds**, **obligation**, **offsetting**

**collections and offsetting receipts, outlays, and trust fund;** compare with **receipt account**.

**Fannie Mae (Federal National Mortgage Association):** A government-sponsored enterprise (GSE) founded during the Great Depression and federally chartered in 1968 as a shareholder-owned corporation that operates exclusively in the secondary market for residential mortgages (the market in which such mortgages are bought and sold). Fannie Mae provides liquidity to the mortgage market by purchasing qualifying mortgages from private lenders, pooling and securitizing them, and then selling them as mortgage-backed securities (MBSs) in the secondary market. The company also holds mortgage-backed securities and whole mortgages in its portfolio. Since September 2008, Fannie Mae has been in federal conservatorship. See **conservatorship, Freddie Mac, government-sponsored enterprise, and mortgage-backed security**.

**Federal Credit Reform Act of 1990 (FCRA, Title V of the Congressional Budget Act of 1974):** Legislation that changed the treatment of direct loans and loan guarantees in the federal budget from a cash basis to an accrual basis. It requires that the federal budget record nonadministrative costs and collections associated with a new loan or loan guarantee on a present-value basis in the year in which the loan is disbursed. Under credit reform, the federal cash flows associated with loans and loan guarantees are discounted to that time of disbursement using the interest rates on Treasury securities of comparable maturity. See **accrual accounting, cash accounting, credit reform, and present value**.

**federal funds:** In the federal accounting structure, all accounts through which collections of money and expenditures are recorded, except those classified by law as trust funds. Federal funds include several types of funds, one of which is the general fund. See **expenditure account, general fund, and receipt account;** compare with **trust fund**.

**federal funds rate:** The interest rate that financial institutions charge each other for overnight loans of their monetary reserves. The Federal Reserve uses this rate to conduct monetary policy. A rise in the federal funds rate (compared with other short-term interest rates) suggests a

tightening of monetary policy, whereas a fall suggests an easing. (FRB) See **Federal Open Market Committee, monetary policy, short-term interest rate, and Taylor rule**.

**Federal Open Market Committee:** The group within the Federal Reserve System that determines the stance of monetary policy. The committee is composed of 12 members, including the 7 members of the Board of Governors of the Federal Reserve System, the president of the Federal Reserve Bank of New York, and a rotating group of 4 of the other 11 presidents of the regional Federal Reserve Banks. The open-market desk at the Federal Reserve Bank of New York implements that policy with open-market operations (the purchase or sale of government securities), which influence short-term interest rates—especially the federal funds rate—and the growth of the money supply. See **federal funds rate, Federal Reserve System, monetary policy, and short-term interest rate**.

**Federal Reserve balance sheet:** The accounting of the assets and liabilities of the Federal Reserve System. The Federal Reserve's assets traditionally consist of government securities and loans that it extends to its member banks; its liabilities traditionally consist of the currency it has issued as well as its holdings of member banks' reserve accounts.

**Federal Reserve System:** The central bank of the United States. The Federal Reserve is responsible for setting the nation's monetary policy and overseeing credit conditions. See **central bank, discount rate, Federal Open Market Committee, and monetary policy**.

**financing account:** A nonbudgetary account required for a credit program (by the Federal Credit Reform Act of 1990) that reconciles subsidies calculated on an accrual basis with the cash flows associated with credit activities. The account tracks flows between the Treasury, the program account, and the public. The net cash flow in each financing account for a fiscal year is shown in the federal budget as an "other means of financing." See **accrual accounting, credit reform, credit subsidy, means of financing, and program account;** compare with **liquidating account**.

**fiscal policy:** The government's tax and spending policies, which influence the amount and maturity of

government debt as well as the level, composition, and distribution of national output and income. See **debt** and **fiscal stimulus**.

**fiscal stimulus:** Changes in tax rates or government spending intended to encourage economic activity. Fiscal stimulus typically takes the form of temporary or permanent reductions in tax rates, or debt-financed increases in the government's transfer payments or purchases of goods and services. See **economic stimulus** and **fiscal policy**; compare with **monetary stimulus**.

**fiscal year:** A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end—for example, fiscal year 2011 began on October 1, 2010, and will end on September 30, 2011. The *budget year* is the fiscal year for which the budget is being considered; in relation to a session of Congress, it is the fiscal year that starts on October 1 of the calendar year in which that session of Congress began. See **advance appropriation, appropriation act, baseline, budget resolution, budget year, current year, deficit, discretionary spending limits, forward funding, obligation delay, outlays, out-year, pay-as-you-go, surplus, and unobligated balances**.

**foreign direct investment:** Financial investment by which a person or an entity acquires an active ownership share of a foreign business. As measured by the Bureau of Economic Analysis, foreign direct investment includes only investments that result in an ownership share greater than 10 percent of the value of a business.

**forward funding:** The provision of budget authority that becomes available for obligation in the last quarter of a fiscal year and remains available during the following fiscal year. Forward funding typically finances ongoing education grant programs. See **budget authority, fiscal year, and obligation**; compare with **advance appropriation, obligation delay, and unobligated balances**.

**Freddie Mac (Federal Home Loan Mortgage Corporation):** A government-sponsored enterprise founded in 1970 and federally chartered in 1989 as a shareholder-owned corporation that operates exclusively in the secondary market for residential mortgages (the market in which such mortgages are bought and sold).

Freddie Mac provides liquidity to the mortgage market by purchasing qualifying mortgages from private lenders, pooling and securitizing them, and then selling them as mortgage-backed securities in the secondary market. The company also holds MBSs and whole mortgages in its portfolio. Since September 2008, Freddie Mac has been in federal conservatorship. See **conservatorship, Fannie Mae, government-sponsored enterprise, and mortgage-backed security**.

**GDI:** See **gross domestic income**.

**GDP:** See **gross domestic product**.

**GDP gap:** The difference between actual and potential gross domestic product, expressed as a percentage of potential GDP. See **gross domestic product** and **potential gross domestic product**.

**GDP price index:** A summary measure of the prices of all goods and services that make up gross domestic product. The change in the GDP price index is used as a measure of inflation in the overall economy. See **gross domestic product** and **inflation**.

**general fund:** One category of federal funds in the government's accounting structure. The general fund records all revenues and offsetting receipts not earmarked by law for a specific purpose and all spending financed by those revenues and receipts. See **federal funds, offsetting collections and offsetting receipts, and revenues**; compare with **trust fund**.

**Ginnie Mae (Government National Mortgage Association):** A government-owned corporation within the Department of Housing and Urban Development that guarantees the timely payment of principal and interest on securities that are backed by single-family and multifamily residential mortgages insured by government agencies, including the Federal Housing Administration and the Department of Veterans Affairs. See **mortgage-backed security**.

**GNP:** See **gross national product**.

**government-sponsored enterprise:** A financial institution created by federal law, generally through a

federal charter, to carry out activities such as increasing credit availability for borrowers, reducing borrowing costs, or enhancing liquidity in particular sectors of the economy, notably agriculture and housing. Two of the housing GSEs, Fannie Mae and Freddie Mac, were placed into federal conservatorship in September 2008. See **conservatorship**, **Fannie Mae**, and **Freddie Mac**.

**grants:** Transfer payments from the federal government to state and local governments or other recipients to help fund projects or activities that do not involve substantial federal participation. See **transfer payments**.

**grants-in-aid:** Grants from the federal government to state and local governments to help provide for programs of assistance or service to the public.

**gross debt:** See **debt**.

**gross domestic income (GDI):** The sum of all income earned in the domestic production of goods and services. In theory, GDI should equal gross domestic product, but measurement difficulties leave a statistical discrepancy between the two. (BEA) See **gross domestic product**.

**gross domestic product (GDP):** The total market value of goods and services produced domestically during a given period. That value is conceptually equal to gross domestic income, but measurement difficulties result in a statistical discrepancy between the two. The components of GDP are consumption (household and government), gross investment (private and government), and net exports. (BEA) See **consumption**, **domestic demand**, **expansion**, **GDP gap**, **GDP price index**, **gross domestic income**, **gross investment**, **gross national product**, **national income and product accounts**, **net exports**, and **potential gross domestic product**.

**gross investment:** A measure of additions to the capital stock that does not subtract depreciation of existing capital. See **capital**, **depreciation**, and **gross domestic product**.

**gross national product (GNP):** The total market value of goods and services produced during a given period by labor and capital supplied by residents of a country, regardless of where the labor and capital are located. That value is conceptually equal to the total income accruing

to residents of the country during that period (national income). GNP differs from gross domestic product primarily by including the capital income that residents earn from investments abroad and excluding the capital income that nonresidents earn from domestic investment. See **gross domestic product** and **national income**.

**H** **Health Care and Education Reconciliation Act of 2010 (HCERA, Public Law 111-152):** One of two laws enacted in 2010 that made major changes to the U.S. health care and health insurance systems. HCERA amended many provisions that were created or amended by the Patient Protection and Affordable Care Act, and it amended the Higher Education Act of 1965, replacing the federal program that provides guarantees for student loans with direct loans and increasing spending for the Pell Grant program. See **Patient Protection and Affordable Care Act**.

**home equity:** The value that an owner has in a home, calculated by subtracting the value of any outstanding mortgages (or other loans) secured by the property from the home's current market value.

**household survey:** See **employment**.

**I** **nflation:** Growth in a general measure of prices, usually expressed as an annual rate of change. See **constant dollar**, **consumer price index**, **core inflation**, **current dollar**, **domestic economic profits**, **GDP price index**, **price index for personal consumption expenditures**, and **Treasury inflation-protected security**.

**insurance exchange:** Established in March 2010 by the Patient Protection and Affordable Care Act and scheduled to begin operating in 2014. Each insurance exchange will serve as a marketplace in which consumers can compare premiums and benefits of health insurance plans available where they live. Each state's exchange will verify eligibility for the program and help administer federal tax credits and subsidies that will reduce premiums and cost-sharing requirements for certain

individuals and families. See **Patient Protection and Affordable Care Act** and **premium assistance credit**.

**interest rate spread:** The difference between two interest rates.

**inventories:** Stocks of goods held by businesses for further processing or for sale. (BEA) See **business fixed investment, domestic economic profits, and investment**.

**investment:** *Physical investment* is the current product set aside during a given period to be used for future production; an addition to the capital stock. As measured by the national income and product accounts, *private domestic investment* consists of investment in residential and nonresidential structures, producers' durable equipment and software, and the change in business inventories. *Financial investment* is the purchase of a financial security, such as a stock, bond, or mortgage. *Investment in human capital* is spending on education, training, health services, and other activities that increase the productivity of the workforce. Investment in human capital is not treated as investment by the national income and product accounts. See **capital, inventories, national income and product accounts, and productivity**.

**J**

**JGTRRA:** See **Jobs and Growth Tax Relief Reconciliation Act of 2003**.

**Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA, Public Law 108-27):** A law that reduced taxes by advancing to 2003 the effective date of several tax reductions previously enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001. JGTRRA also increased the exemption amount for the individual alternative minimum tax, reduced the tax rates for income from dividends and capital gains, and expanded the portion of capital purchases that businesses could immediately deduct through 2004. The tax provisions were set to expire on various dates, and some of those provisions have been extended temporarily. (The law also provided roughly \$20 billion for fiscal relief to states.) See **alternative minimum tax; Economic Growth and Tax Relief Reconciliation Act of 2001;**

and **Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010**.

**L**

**labor force:** The number of people age 16 or older in the civilian noninstitutionalized population who have jobs or who are available for work and are actively seeking jobs. (The civilian noninstitutionalized population excludes members of the armed forces on active duty and people in penal or mental institutions or in homes for the elderly or infirm.) The *labor force participation rate* is the labor force as a percentage of the civilian noninstitutionalized population age 16 or older. (BLS) See **discouraged workers, potential labor force, and unemployment rate**.

**labor income:** Income that is derived from employment, such as wages and salaries. Compare with **capital income**.

**labor productivity:** See **productivity**.

**liquidating account:** A budgetary account associated with a credit program that records all cash flows resulting from direct loan obligations and loan guarantee commitments made under that program before October 1, 1991. See **credit reform**; compare with **financing account** and **program account**.

**liquidity:** With respect to an asset, liquidity is the quality of being readily convertible into cash—that is, the ease with which an asset can be bought and sold in large quantities without affecting its price. Treasury securities are among the most liquid of assets. With respect to an institution, liquidity is the ability to meet financial obligations by virtue of possessing assets that can be readily converted into cash.

**loan-to-value ratio:** The relationship between the amount of a loan (such as a mortgage) and the value of the underlying collateral. The ratio is one measure that lenders use to assess the riskiness of a loan.

**long-term interest rate:** An interest rate associated with a security that matures in 10 or more years.

**M**andatory spending: See **direct spending**.

**marginal tax rate:** The tax rate that would apply to an additional dollar of a taxpayer's income. Compare with **effective tax rate** and **statutory tax rate**.

**market risk:** Risks that investors cannot protect themselves against by diversifying their portfolios; the common component of risk in the prices of all assets. Investors require compensation for market risk because investments exposed to such risk are more likely to have low returns when the economy as a whole is weak and resources are highly valued. Investors are compensated by a higher expected return on assets exposed to market risk, known as the *market risk premium*. See **risk premium**.

**MBS:** See **mortgage-backed security**.

**means of financing:** Means by which a budget deficit is financed or a surplus is used. Means of financing are not included in the budget totals. The primary means of financing is borrowing from the public. In general, the cumulative amount borrowed from the public (debt held by the public) will increase if there is a deficit and decrease if there is a surplus, although other factors can affect the amount that the government must borrow. Those factors, known as *other means of financing*, include reductions (or increases) in the government's cash balances, seigniorage, changes in outstanding checks, changes in accrued interest costs included in the budget but not yet paid, and cash flows reflected in credit financing accounts. See **debt**, **deficit**, **financing account**, **seigniorage**, and **surplus**.

**monetary policy:** The strategy of influencing the availability and cost of money and credit to affect output and inflation. An "easy" monetary policy attempts to reduce interest rates to increase aggregate demand, but it may lead to higher inflation. A "tight" monetary policy attempts to raise interest rates in the near term in order to reduce inflationary pressure by lowering aggregate demand. The Federal Reserve System sets monetary policy in the United States. See **aggregate demand**, **central bank**, **discount rate**, **federal funds rate**, **Federal Open Market Committee**, **Federal Reserve System**,

**inflation**, **monetary stimulus**, and **short-term interest rate**.

**monetary stimulus:** An increase in the availability of (and hence a lower cost for) money and credit that is intended to encourage economic activity. The Federal Reserve can lower short-term interest rates (and, to a more limited extent, long-term rates) by purchasing Treasury or other securities through its open-market operations. To a more limited extent, it can provide stimulus by reducing the reserve ratio (the percentage of assets that member banks are required to keep on deposit at the Federal Reserve) or by lowering discount rates (the rates at which it lends money to member banks). See **discount rate**, **economic stimulus**, and **monetary policy**; compare with **fiscal stimulus**.

**mortgage-backed security (MBS):** A financial security whose payments of interest and principal are backed by the payments from a pool of mortgages. MBSs are sometimes structured to create multiple classes of claims (or tranches) of different seniority and timing. See **Fannie Mae**, **Freddie Mac**, and **Ginnie Mae**.

**N**ational income: Total income earned by U.S. residents from all sources, including employees' compensation (wages, salaries, benefits, and employers' share of payroll taxes for social insurance programs), corporate profits, net interest, rental income, and proprietors' income. See **gross domestic product**, **gross national product**, and **national saving**.

**national income and product accounts (NIPAs):** Official U.S. accounts that track the level and composition of gross domestic product, the prices of its components, and the way in which the costs of production are distributed as income. (BEA) See **consumption**, **depreciation**, **domestic economic profits**, **gross domestic product**, **investment**, and **net federal government saving**.

**national saving:** Total saving by all sectors of the economy: personal saving, business saving (corporate after-tax profits not paid as dividends), and government saving (budget surpluses). National saving represents all income not consumed, publicly or privately, during a

given period. As measured by the Bureau of Economic Analysis, national saving does not include unrealized capital gains or losses. See **capital gains and losses**, **national income**, **net national saving**, **personal saving**, **saving rate**, and **surplus**.

**natural rate of unemployment:** The rate of unemployment arising from all sources except fluctuations in aggregate demand. Those sources include *frictional unemployment*, which is associated with normal turnover of jobs, and *structural unemployment*, which includes unemployment caused by mismatches between the skills of available workers and the skills necessary to fill vacant positions and unemployment caused when wages exceed their market-clearing levels because of institutional factors, such as legal minimum wages, the presence of unions, social conventions, or employers' wage-setting practices intended to increase workers' morale and effort. See **aggregate demand**, **potential labor force**, and **unemployment rate**.

**net exports:** A country's exports of goods and services minus its imports of goods and services; also referred to as the *trade balance*. See **current-account balance**, **domestic demand**, and **gross domestic product**.

**net federal government saving:** A term used in the national income and product accounts to identify the difference between federal current receipts and federal current expenditures (including consumption of fixed capital). When receipts exceed expenditures, net federal government saving is positive (formerly identified in the national income and product accounts as a federal government surplus); when expenditures exceed receipts, net federal government saving is negative (formerly identified in the national income and product accounts as a federal government deficit). See **capital** and **national income and product accounts**.

**net interest:** In the federal budget, net interest comprises the government's interest payments on debt held by the public (as recorded in budget function 900), offset by interest income that the government receives on loans and cash balances and by earnings of the National Railroad Retirement Investment Trust. See **budget function**, **debt**, **debt service**, and **deficit**.

**net national saving:** National saving minus depreciation of physical capital. See **capital**, **depreciation**, and **national saving**.

**NIPAs:** See **national income and product accounts**.

**nominal:** A measure based on current-dollar value. *Nominal income* and *spending* are measured in current dollars. The *nominal interest rate* on debt is the promised dollar return, without an adjustment for inflation. The *nominal exchange rate* is the rate at which a unit of one currency trades for a unit of another currency. See **current dollar**; compare with **constant dollar** and **real**.



**Obligation:** A legally binding commitment by the federal government that will result in outlays, immediately or in the future. See **advance appropriation**, **appropriation act**, **contract authority**, **expenditure account**, **forward funding**, **obligation delay**, **outlays**, **recession**, and **unobligated balances**.

**obligation delay:** Legislation that precludes the obligation of an amount of budget authority provided in an appropriation act or in some other law until some time after the first day on which that budget authority would normally be available. For example, language in an appropriation act for fiscal year 2010 that precludes obligation of an amount until March 1 is an obligation delay; without that language, the amount would have been available for obligation on October 1, 2009 (the first day of fiscal year 2010). See **appropriation act**, **budget authority**, **fiscal year**, and **obligation**; compare with **advance appropriation**, **forward funding**, and **unobligated balances**.

**obligation limitation:** A provision of a law or legislation that restricts or reduces the availability of budget authority that would have become available under another law. Typically, an obligation limitation is included in an appropriation act. The limitation may affect budget authority provided in that act, but more often, it affects direct spending that has been provided in an authorization act. Generally, when an appropriation act routinely places an obligation limitation on direct spending, the limitation is treated as a discretionary resource and the associated outlays are treated as

discretionary spending. See **appropriation act, authorization act, budgetary resources, budget authority, direct spending, discretionary spending,** and **outlays**.

**off-budget:** Spending or revenues sometimes excluded from the budget totals by law. The revenues and outlays of the two Social Security trust funds (the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund) and the transactions of the Postal Service are off-budget (but are included in the total budget). See **outlays, revenues,** and **trust fund**.

**offsetting collections and offsetting receipts:** Funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are credited to an expenditure account (in the case of offsetting collections) or to a receipt account (in the case of offsetting receipts). Both types of collections are treated for budgetary purposes as negative budget authority and outlays. Collections that result from the government's exercise of its sovereign or governmental powers are ordinarily classified as revenues, although they are classified as offsetting collections or offsetting receipts when a law requires it. See **budget authority, budget function, expenditure account, general fund, outlays, receipt account, reconciliation, trust fund,** and **user fee**; compare with **revenues**.

**other means of financing:** See **means of financing**.

**outlays:** Spending to pay a federal obligation. Outlays may pay for obligations incurred in a prior fiscal year or in the current year; hence, they flow partly from unexpended balances of prior-year budget authority and partly from budget authority provided for the current year. For most categories of spending, outlays are recorded on a cash accounting basis. However, outlays for interest on debt held by the public are recorded on an accrual accounting basis, and outlays for direct loans and loan guarantees reflect estimated subsidy costs instead of cash transactions. See **accrual accounting, baseline, budget authority, budget function, cash accounting, credit reform, credit subsidy, debt, deficit, direct spending, discretionary spending limits, expenditure account, fiscal year, obligation, obligation limitation, off-budget, offsetting collections and offsetting receipts, surplus,** and **trust fund**.

**output gap:** See **GDP gap**.

**out-year:** A fiscal year following the budget year. See **fiscal year**.

## P

**atient Protection and Affordable Care Act**

**(PPACA, Public Law 111-148):** One of two laws enacted in March 2010 that made major changes to the U.S. health care and health insurance systems. Among its provisions, PPACA establishes a mandate for most legal residents to obtain health insurance, provides subsidies for health insurance, and expands Medicaid. It offset those costs with increased taxes and other revenues and reduced Medicare spending. The law also included several private health insurance market reforms and measures designed to enhance delivery and quality of care. See **Health Care and Education Reconciliation Act of 2010** and **insurance exchange**.

**pay-as-you-go (PAYGO):** A procedure established in law that is intended to ensure that laws affecting direct spending or revenues are deficit neutral in or over some period of time. The procedure was first created in the Deficit Control Act, which expired at the end of 2006; however, a similar procedure has been resurrected in the Statutory Pay-As-You-Go Act of 2010. *Pay-as-you-go* may also refer to the rule of the Senate, first established in 1993, or the rule of the House of Representatives, first established in 2007, which prohibits consideration of direct spending or revenue legislation that is not deficit neutral within certain time periods. See **Balanced Budget and Emergency Deficit Control Act of 1985, baseline, Budget Enforcement Act of 1990, deficit, direct spending, fiscal year, revenues, sequestration, Statutory Pay-As-You-Go Act of 2010,** and **surplus**.

**PCE price index:** See **price index for personal consumption expenditures**.

**personal income:** See **disposable personal income**.

**personal saving:** Saving by households. Personal saving equals disposable personal income minus spending for consumption, interest payments, and transfer payments. The *personal saving rate* is personal saving as a percentage of disposable personal income. (BEA) See **consumption,**

**disposable personal income, national saving, saving rate, and transfer payments;** compare with **private saving**.

**Phillips curve:** A hypothesized inverse relationship between changes in wage rates and the unemployment rate (the *wage Phillips curve*) or between inflation and the unemployment rate (the *price Phillips curve*). Generally, wages and prices rise faster when the unemployment rate is low, but the relationship is not fixed over time, and in some circumstances, such as during the oil price shocks of the 1970s, the relationship breaks down. (Named after A.W.H. Phillips, who noted the relationship in 1957.)

**point of order:** The procedure by which a member of a legislature (or similar body) questions an action that is being taken, or that is proposed to be taken, as contrary to that body's rules, practices, or precedents.

**potential gross domestic product:** The level of real gross domestic product that corresponds to a high level of resource (labor and capital) use. (Procedures for calculating potential GDP are described in *CBO's Method for Estimating Potential Output: An Update*, August 2001.) See **cyclically adjusted budget deficit or surplus, GDP gap, gross domestic product, potential output, and real**.

**potential hours worked:** The number of hours worked by the potential labor force.

**potential labor force:** The labor force that exists when the unemployment rate equals the natural rate of unemployment. See **labor force and natural rate of unemployment**.

**potential output:** The level of production that corresponds to a high level of resource (labor and capital) use. Potential output for the national economy is also referred to as *potential gross domestic product*. (Procedures for calculating potential output are described in *CBO's Method for Estimating Potential Output: An Update*, August 2001.) See **potential gross domestic product**.

**premium assistance credit:** Beginning in 2014, a refundable tax credit for the purchase of health insurance through an insurance exchange. The credit will be available to some nonelderly people with modified

adjusted gross income between 138 percent and 400 percent of the federal poverty level. People who have offers of coverage from their employer generally will not be eligible. See **insurance exchange**.

**present value:** A single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The present value depends on the rate of interest (known as the discount rate) that is used to translate future cash flows into current dollars. For example, if \$100 is invested on January 1 at an annual interest rate of 5 percent, it will grow to \$105 by January 1 of the next year. Hence, at an annual 5 percent interest rate, the present value of \$105 payable a year from today is \$100. See **credit subsidy, discount rate, and Federal Credit Reform Act of 1990**.

**price index for personal consumption expenditures (PCE price index):** A summary measure of the prices of all goods and services that make up personal consumption expenditures. The Federal Reserve uses measures based on this index as its primary measures of inflation in conducting monetary policy, because they are more representative of current consumer spending patterns than the consumer price index. Also referred to as the *chained price index for personal consumption expenditures*. See **consumer price index, consumption, core inflation, and inflation**.

**primary deficit or surplus:** The total budget deficit or surplus excluding net interest.

**private saving:** Saving by households and businesses. Private saving is equal to personal saving plus after-tax corporate profits minus dividends paid. (BEA) See **consumption;** compare with **personal saving**.

**productivity:** Average real output per unit of input. *Labor productivity* is average real output per hour of labor. The growth of labor productivity is defined as the growth of real output that is not explained by the growth of labor input alone. *Total factor productivity* is average real output per unit of combined labor and capital services. The growth of total factor productivity is defined as the growth of real output that is not explained by the growth of labor and capital. Labor productivity and total factor productivity differ in that increases in capital per worker

raise labor productivity but not total factor productivity. (BLS) See **capital services, investment, and real.**

**program account:** A budgetary account associated with a credit program that receives an appropriation of the subsidy cost of that program's loan obligations or commitments as well as (in some cases) the program's administrative expenses. From the program account, the subsidy cost is disbursed to the applicable financing account. See **credit reform, credit subsidy, and financing account;** compare with **liquidating account.**

**R****real:** Adjusted to remove the effects of inflation. *Real output* represents the quantity, rather than the dollar value, of goods and services produced. *Real income* represents the power to purchase real output. *Real data* at the finest level of disaggregation are constructed by dividing the corresponding nominal data, such as spending or wage rates, by a price index. *Real aggregates*, such as real gross domestic product, are constructed by a procedure that allows the real growth of the aggregate to reflect the real growth of its components, appropriately weighted by the importance of the components. A *real interest rate* is a nominal interest rate adjusted for expected inflation; it is often approximated by subtracting an estimate of the expected inflation rate from the nominal interest rate. See **business cycle, constant dollar, inflation, potential gross domestic product, productivity, recession, and Treasury inflation-protected security;** compare with **current dollar and nominal.**

**receipt account:** An account established within federal funds and trust funds to record offsetting receipts or revenues credited to that fund. The receipt account typically finances the obligations and outlays from an associated expenditure account. See **federal funds, offsetting collections and offsetting receipts, outlays, and trust fund;** compare with **expenditure account.**

**recession:** A significant decline in economic activity spread across the economy, lasting more than a few months, and normally visible in production, employment, real income, and other indicators. A recession begins just after the economy reaches a peak of activity and ends when the economy reaches its trough.

(NBER) See **business cycle, cyclical deficit or surplus, and real.**

**reconciliation:** A special Congressional procedure often used to implement the revenue and spending targets established in the budget resolution. The budget resolution may contain *reconciliation instructions*, which direct Congressional committees to make changes in laws under their jurisdictions that affect revenues or direct spending to achieve a specified budgetary result. The legislation to implement those instructions is usually combined into a comprehensive *reconciliation bill*, which is considered under special rules. Reconciliation affects revenues, direct spending, and offsetting receipts but usually not discretionary spending. See **budget resolution, direct spending, discretionary spending, offsetting collections and offsetting receipts, and revenues.**

**recovery:** A significant, broad-based increase in economic activity that begins just after the economy reaches a trough of activity and ends when the economy reaches the level of its previous peak. See **business cycle.**

**rescission:** The withdrawal of authority to incur financial obligations that was previously provided by law and has not yet expired. See **budget authority and obligation.**

**revenues:** Funds collected from the public that arise from the government's exercise of its sovereign or governmental powers. Federal revenues come from a variety of sources, including individual and corporate income taxes, excise taxes, customs duties, estate and gift taxes, fees and fines, payroll taxes for social insurance programs, and miscellaneous receipts (such as earnings of the Federal Reserve System, donations, and bequests). Federal revenues are also known as *federal governmental receipts*. See **baseline, budget resolution, deficit, general fund, off-budget, pay-as-you-go, reconciliation, sequestration, Statutory Pay-As-You-Go Act of 2010, surplus, trust fund, and user fee;** compare with **offsetting collections and offsetting receipts.**

**risk premium:** The additional return (over the risk-free rate) that investors require to hold assets whose returns are risky. The risk premium is often associated with market or aggregate risk—risks that cannot be eliminated

by diversifying a portfolio. The risk premium for equities is also called the *equity premium*. See **market risk**.

**S corporation:** A domestically owned corporation with no more than 100 owners who have elected to pay taxes under Subchapter S of the Internal Revenue Code. An S corporation is taxed like a partnership: It is exempt from the corporate income tax, but its owners pay individual income taxes on all of the business's income, even if some of the earnings are retained by the company.

**saving rate:** See **national saving** and **personal saving**.

**savings bond:** A nontransferable security denominated between \$50 and \$10,000 and sold by the Treasury either at a discount or at face value with an interest payment. The interest earned is exempt from state and local taxation and exempt from federal taxation until the bond is redeemed or reaches maturity.

**securitization:** A financial process that involves aggregating a number of assets into a pool (often by selling the assets to an entity specifically created for that purpose) and then issuing a new set of securities backed by the assets and the flows of income they generate. The aggregation of assets is intended to redistribute (and thus dilute) the risk that any of the assets will fail to generate the expected income flows.

**seigniorage:** The gain to the government from the difference between the face value of currency and coins put into circulation and the cost of producing them. Seigniorage is considered a means of financing and is not included in the budget totals. See **means of financing**.

**sequestration:** An enforcement mechanism by which the President orders the cancellation of budgetary resources in amounts sufficient to eliminate a deficit. First established in the Deficit Control Act, the mechanism expired with the expiration of the act in 2006. However, the Statutory Pay-As-You-Go Act of 2010 resurrected sequestration as the enforcement mechanism under that act's pay-as-you-go procedures. If at the end of a session of Congress, there is a debit on a pay-go scorecard, the President must implement a cancellation of budgetary

resources sufficient to offset the debit in the budget year. The act exempts several direct spending programs and activities from sequestration, including Social Security and other retirement programs, Medicaid and other low-income programs, and federal insurance programs. Programs subject to sequestration are cut by a uniform percentage, except cuts in Medicare, which are limited to a maximum of 4 percent. See **Balanced Budget and Emergency Deficit Control Act of 1985, budgetary resources, budget year, direct spending, discretionary spending limits, pay-as-you-go, revenues, and Statutory Pay-As-You-Go Act of 2010**.

**short-term interest rate:** The interest rate earned by a debt instrument (such as a Treasury bill) that will mature within one year. See **federal funds rate, Federal Open Market Committee, and monetary policy**.

**state and local government security (SLGS):** A timed deposit sold by the Treasury to issuers of state and local government tax-exempt debt to facilitate compliance with the Internal Revenue Code's *arbitrage provisions*, which restrict state and local governments from earning profits by investing bond proceeds in higher-yielding investments.

**Statutory Pay-As-You-Go Act of 2010 (Public Law 111-139, Title I):** A law establishing requirements generally intended to ensure that laws affecting revenues or direct spending will not worsen federal budget deficits. The Office of Management and Budget maintains scorecards for rolling 5-year and 10-year periods. Each scorecard displays a running tally of the average annual budgetary effects of enacted legislation subject to the pay-as-you-go requirements. Legislation designated by law as an emergency requirement is not subject to pay-as-you-go requirements, and pay-as-you-go estimates are adjusted to exclude some of the budgetary costs of legislation in four policy areas: payments to physicians under Medicare; estate and gift taxes, the alternative minimum tax; and certain tax provisions enacted in 2001 and 2003 (those adjustments are effective only through December 31, 2012). For pay-as-you-go legislation, the Chairmen of the Budget Committees submit an estimate of the budgetary effects of that legislation for printing in the Congressional Record before voting on passage. The pay-as-you-go legislation contains a statement requiring its budgetary effects to be determined by reference to that estimate. If this procedure is not followed, the Office of

Management and Budget is responsible for preparing the cost estimates of enacted legislation. If, at the end of a session of Congress, there is a debit on either scorecard for the budget year, the President implements a sequestration of available budgetary resources for nonexempt direct spending programs sufficient to eliminate the debit for that year. See **baseline, budgetary resources, budget year, deficit, direct spending, pay-as-you-go, revenues, and sequestration.**

**statutory tax rate:** A tax rate specified by law. In some cases, such as with individual and corporate income taxes, the statutory tax rate varies with the amount of taxable income. (For example, under the federal corporate income tax, the statutory tax rate for companies with taxable income below \$50,000 is 15 percent, whereas the rate for corporations with taxable income greater than \$18.3 million is 35 percent.) In other cases, the statutory tax rate is uniform. (For instance, the statutory federal tax rate on gasoline is 18.4 cents per gallon for all taxpayers.) Compare with **effective tax rate** and **marginal tax rate.**

**Subchapter S corporation:** See **S corporation.**

**subsidy cost:** See **credit subsidy.**

**surplus:** The amount by which the federal government's total revenues exceed its total outlays in a given period, typically a fiscal year. See **baseline, cyclical deficit or surplus, cyclically adjusted budget deficit or surplus, debt service, fiscal year, means of financing, national saving, outlays, pay-as-you-go, and revenues;** compare with **deficit.**

**sustainable growth rate (SGR):** The formula that determines updates to payment rates for physicians under the Medicare program. The SGR sets annual and cumulative spending targets for those payments. If total spending exceeds the targets, an across-the-board reduction is supposed to be made in future fees to bring spending back into line (both annually and cumulatively). Since 2003, however, the Congress and the President have overridden such reductions.



**ARP:** See **Troubled Asset Relief Program.**

**Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (2010 tax act, Public Law 111-312):** Temporarily extended through 2012 provisions set to expire in 2010 that were initially enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001, the Jobs Growth and Tax Relief Reconciliation Act of 2003, and the American Recovery and Reinvestment Act of 2009. Those extensions affected individual income tax rates, credits, and deductions. The act also increased the exemption amount for the alternative minimum tax, reduced the employee's contribution for the Social Security payroll tax, modified other tax provisions, and extended benefits for long-term unemployed workers. See **alternative minimum tax, American Recovery and Reinvestment Act of 2009, Economic Growth and Tax Relief Reconciliation Act of 2001, and Jobs and Growth Tax Relief Reconciliation Act of 2003.**

**Taylor rule:** A rule for the conduct of monetary policy—specifically, the setting of the federal funds rate on the basis of how much inflation differs from a target inflation rate and how much the unemployment rate differs from an estimated natural rate of unemployment. In some formulations, the difference between gross domestic product and an estimate of potential gross domestic product is used instead of the difference in unemployment rates. (Named after John Taylor, an economist who proposed such a rule in 1993.) See **federal funds rate.**

**TIPS:** See **Treasury inflation-protected security.**

**total factor productivity:** See **productivity.**

**trade balance:** See **net exports.**

**trade-weighted value of the dollar:** The value of the U.S. dollar relative to the currencies of U.S. trading partners, with the weight of each country's currency equal to that country's share of U.S. trade. The *real trade-weighted value of the dollar* is an index of the trade-weighted value of the dollar whose movement is adjusted for the difference between U.S. inflation and inflation

among U.S. trading partners. An increase in the real trade-weighted value of the dollar means that the price of U.S.-produced goods and services has increased relative to the price of foreign-produced goods and services. See **inflation**.

**transfer payments:** Payments made to a person or organization for which no current or future goods or services are required in return. Federal transfer payments include Social Security and unemployment benefits. (BEA) See **disposable personal income, grants, and personal saving**.

**Treasury bill:** A security issued by the Treasury with an original maturity of no more than one year. Interest on a Treasury bill is the difference between the purchase price and the value paid at redemption.

**Treasury bond:** A fixed-rate, interest-bearing security issued by the Treasury with an original maturity of more than 10 years.

**Treasury inflation-protected security (TIPS):** A security issued by the Treasury that is designed to protect investors from inflation by offering a fixed real rate of interest. The principal of a TIPS is linked to the consumer price index and is thus adjusted to reflect the change in that index; at maturity, the security pays the greater of the original or the adjusted principal. Holders of TIPS receive semiannual interest payments based on the fixed rate of interest and the adjusted principal amount. See **consumer price index, inflation, and real**.

**Treasury note:** A fixed-rate, interest-bearing security issued by the Treasury with an original maturity of more than a year but not more than 10 years.

**Troubled Asset Relief Program (TARP):** A program that permits the Secretary of the Treasury to purchase or insure troubled financial assets. Authority for the program was initially set by the Emergency Economic Stabilization Act of 2008 at \$700 billion in assets outstanding at any one time; the authority to make new investments has expired. The TARP's activities have included the purchase of preferred stock from financial institutions, support to automakers and related businesses, a program to avert housing foreclosures, and

partnerships with the private sector. See **Emergency Economic Stabilization Act of 2008**.

**trust fund:** In the federal accounting structure, an account designated by law as a trust fund (regardless of any other meaning of that term). A trust fund records the revenues, offsetting receipts, or offsetting collections earmarked for the purpose of the fund, as well as budget authority and outlays of the fund that are financed by those revenues or receipts. The federal government has more than 200 trust funds. The largest and best known finance major benefit programs (including Social Security and Medicare) and infrastructure spending (such as the Highway Trust Fund and the Airport and Airway Trust Fund). See **budget authority, expenditure account, general fund, off-budget, offsetting collections and offsetting receipts, outlays, receipt account, and revenues**; compare with **federal funds**.

**U****nemployment rate:** A measure of the number of jobless people who are available for work and are actively seeking jobs, expressed as a percentage of the labor force. (BLS) See **business cycle, compensation, discouraged workers, employment, labor force, and natural rate of unemployment**.

**Unfunded Mandates Reform Act of 1995 (UMRA, Public Law 104-4):** This law, parts of which are incorporated as Title IV of the Congressional Budget Act of 1974, was enacted to address concerns about federal statutes and regulations that require state, local, and tribal governments or the private sector to expend resources (or forgo revenues) to achieve the legislative goal. Requirements not tied to conditions of assistance and those that add responsibilities in some large entitlement programs also are defined in the act as federal mandates. UMRA requires Congressional committees, the Congressional Budget Office, the Office of Management and Budget, and agencies in the executive branch to provide information about the nature and cost of potential federal mandates to assist the Congress and agency decisionmakers as they consider proposed legislation and rules. See **Congressional Budget Act of 1974**.

**unobligated balances:** The portion of budget authority that has not yet been obligated. When budget authority is

provided for one fiscal year, any unobligated balances at the end of that year expire and are no longer available for obligation. When budget authority is provided for a specific number of years, any unobligated balances are carried forward and are available for obligation during the years specified. When budget authority is provided for an unspecified number of years, the unobligated balances are carried forward indefinitely, until one of the following occurs: the balances are expended or rescinded, the purpose for which they were provided is accomplished, or no disbursements have been made for two consecutive years. See **budgetary resources**, **budget authority**, **fiscal year**, and **obligation**; compare with **advance appropriation**, **forward funding**, and **obligation delay**.

**user fee:** Money that the federal government charges for services or for the sale or use of federal goods or resources that generally provide benefits to the recipients beyond those that may accrue to the general public. The amount of the fee is typically related to the cost of the service provided or the value of the good or resource used. In the federal budget, user fees can be classified as offsetting collections, offsetting receipts, or revenues. See **offsetting collections and offsetting receipts** and **revenues**.

**W****ithholding:** The deduction of taxes by an employer or other payor from wages or other taxable

payments to be transmitted directly to a government. Federal tax withholding includes deductions for income taxes, as well as contributions to Social Security and Medicare (payroll taxes). When taxpayers file their tax returns at the end of the taxable year, they either pay the balance of unpaid tax liability or they receive any overpayment as a refund. Federal tax withholding is classified as revenue in the federal budget when received by the Treasury.

**Y****ield:** The average annual rate of return promised on an investment. For a fixed-income security, such as a bond, the yield is determined by several factors, including the security's interest rate, face value, purchase price, and assumed holding period. The *yield to maturity* is the effective interest rate earned on a fixed-income security if it is held until the date on which it matures (comes due for payment).

**yield curve:** The relationship formed by plotting the yields of otherwise comparable fixed-income securities (such as Treasury securities) against their terms to maturity. Typically, yields increase as maturities lengthen, and the rate of increase determines the "steepness" or "flatness" of the yield curve.



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