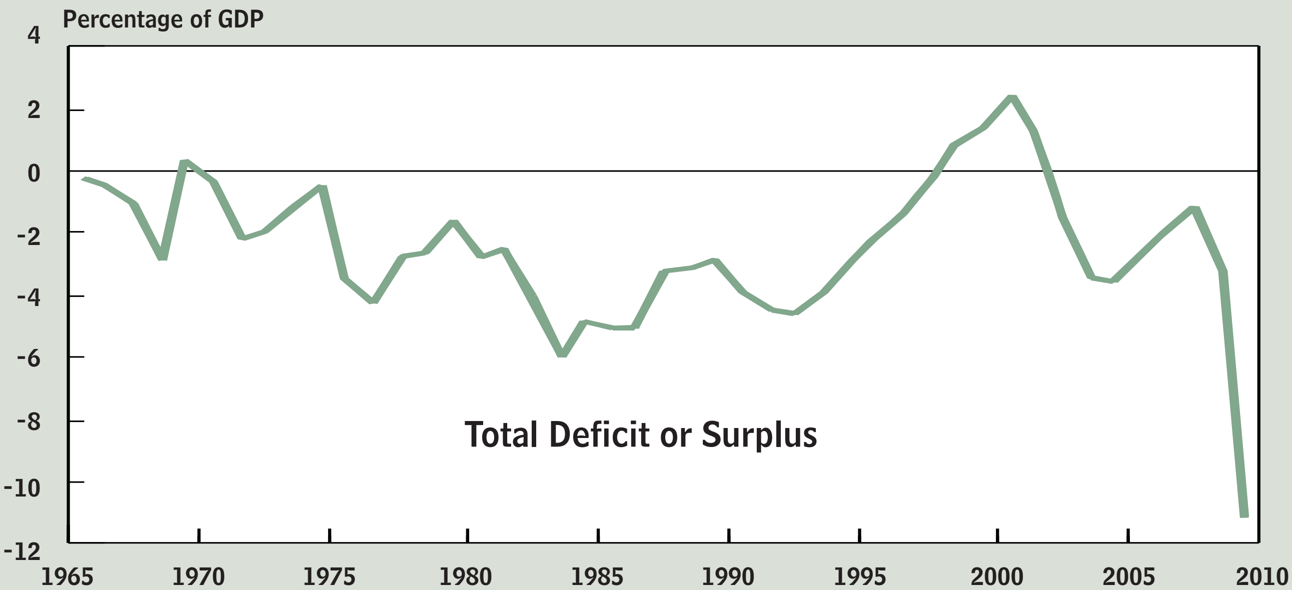
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

The Budget and Economic Outlook: An Update



AUGUST 2009

Pub. No. 3262

CBO

The Budget and Economic Outlook: An Update

August 2009

The Congress of the United States ■ Congressional Budget Office

Notes

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

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

Some of the figures use shaded vertical bars to indicate periods of recession. (A recession extends from the peak of a business cycle to its trough.)

Data from the Commerce Department's Bureau of Economic Analysis on gross domestic product and the national income and product accounts are generally as of June 2009. The bureau's revised estimates, released on July 31, 2009, were published too late to be incorporated into the Congressional Budget Office's latest economic forecast. Consequently, in Chapter 2, only figures and discussions of recent events are consistent with the revised data. The revisions to the national income and product accounts are unlikely to have a major effect on the projections presented in this volume.

Supplemental data for this analysis are available on CBO's Web site (www.cbo.gov).

Preface

This 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 Act of 1974 for CBO to submit to the Committees on the Budget periodic reports about fiscal policy and to provide baseline projections of the federal budget. In accordance with CBO's mandate to provide 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, Thomas Bradley, Kim Cawley, Jeffrey Holland, Sarah Jennings, Kate Massey, and Sam Papenfuss. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Frank Sammartino, Mark Booth, and David Weiner with assistance from the Joint Committee on Taxation. (A detailed list of contributors to the revenue and spending projections appears in Appendix C.)

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, Martin N. Baily, Richard Berner, Martin Feldstein, Kristin J. Forbes, Robert J. Gordon, Robert E. Hall, Jan Hatzius, Douglas Holtz-Eakin, Simon Johnson, Anil Kashyap, Lawrence Katz, Laurence H. Meyer, William D. Nordhaus, Rudolph G. Penner, Adam S. Posen, James Poterba, Alice Rivlin, Nouriel Roubini, Diane C. Swonk, and Stephen P. Zeldes. Douglas Elliott and Wesley Phoa 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 the Summary. Christina Hawley Anthony wrote Chapter 1 with assistance from Barbara Edwards and Pamela Greene. (Santiago Vallinas wrote Box 1-2; David Newman compiled Box 1-3.) David Brauer wrote Chapter 2. The economic outlook presented in Chapter 2 was prepared by the Macroeconomic Analysis Division under the direction of Robert Dennis, Kim Kowalewski, and John Peterson. Robert Arnold and Christopher Williams carried out the economic forecast and projections. David Brauer, Juan Contreras, Naomi Griffin, Juann Hung, Mark Lasky, Joe Mattey, Benjamin Page, John Peterson, Frank Russek, Marika Santoro, David Torregrosa, and Steven Weinberg contributed to the analysis. Holly Battelle and Priscila Hammett provided research assistance. Amber Marcellino, along with Mark Booth, produced Appendix A; Barry Blom produced Appendix B; and Santiago Vallinas produced Appendix C.

Christine Bogusz, Loretta Lettner, and Sherry Snyder edited the report with assistance from Kate Kelly and Leah Mazade. Denise Jordan-Williams assisted in its preparation. Maureen Costantino designed the cover and prepared the report for publication. Lenny Skutnik printed the initial copies, and Linda Schimmel handled the print distribution. Simone Thomas prepared the electronic version for CBO's Web site (www.cbo.gov).

Douglas W. Elmendorf

Douglas W. Elmendorf
Director

August 2009

Contents

Tables

Figures

Figures (Continued)

Boxes

Summary

The Congressional Budget Office (CBO) estimates that the federal budget deficit for 2009 will total $1.6 trillion, which, at 11.2 percent of gross domestic product (GDP), will be the highest since World War II. That deficit figure results from a combination of weak revenues and elevated spending associated with the economic downturn and financial turmoil. The deficit has been boosted by various federal policies implemented in response, including the stimulus legislation and aid for the financial, housing, and automotive sectors.

Although various indicators suggest that the recession may have ended or is likely to end within the next few months, CBO's economic forecast anticipates a relatively slow and tentative recovery. A number of forces, including global economic weakness, continued strains in financial markets, and households' desire to rebuild their savings, are expected to restrain economic growth for the next few years.

CBO estimates that, as the economy recovers, if current laws and policies remained in place, the deficit would shrink but remain above $500 billion per year, or more than 3 percent of GDP, throughout the 2010–2019 period. As a result, debt held by the public would continue to grow as a percentage of GDP during that time. That debt, which was as low as 33 percent of GDP in 2001, would reach an estimated 54 percent of GDP this year and grow to 68 percent of GDP by 2019.

Those baseline projections, which are similar in many respects to the projections CBO prepared in March, reflect spending and revenue assumptions that may underestimate potential deficits. Because they presume no changes in current tax laws, the projections assume the expiration of tax reductions enacted earlier in this decade and provisions that have kept the alternative minimum tax (AMT) from affecting many more taxpayers. Consequently, those assumptions result in projected revenues that, as a percentage of GDP, would be high by historical standards. They also assume that future annual appropriations are held constant in real (inflation-adjusted) terms, resulting in projections of discretionary spending that would be low, relative to GDP, by historical standards. Many other policy outcomes are possible, however. If, for example, those tax reductions were assumed to continue (along with the indexing of the AMT for inflation) and future annual appropriations were assumed to remain at their 2009 share of GDP, the deficit in 2019 would equal 8.5 percent of GDP. (For more details about the budgetary impact of alternative policy actions, see Table 1-7 in Chapter 1.)

Beyond the 10-year budget window, the nation will face further significant fiscal challenges posed by rising health care costs and the aging of the population. Continued large deficits and the resulting increases in federal debt would, over time, reduce economic growth. Putting the nation on a sustainable fiscal course will require some combination of lower spending and higher revenues than the amounts now projected.

The Budget Outlook from 2009 to 2019

The dramatic expansion of the deficit in 2009 (up from 3.2 percent of GDP in 2008) results from a projected rise in outlays of 24 percent (the largest percentage increase since 1952) and a drop in revenues of 17 percent from last year's levels (the largest percentage drop since 1932). Those changes have largely been the result of the severe economic downturn and the fiscal impact of federal policies enacted in response.

On the basis of tax collections through July 2009, CBO expects federal revenues to decline by more than $400 billion from last year's total. Revenues are projected to be 14.9 percent of GDP, nearly 3 percentage points

Summary Table 1.

CBO's Baseline Budget Outlook

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
							In Billions of Dollars							
Total Revenues	2,524	2,100	2,264	2,717	3,010	3,221	3,403	3,577	3,737	3,908	4,081	4,260	14,614	34,177
Total Outlays	2,983	3,688	3,644	3,638	3,600	3,759	3,961	4,135	4,358	4,534	4,703	4,982	18,602	41,314
Total Deficit (-) or Surplus	**-459**	**-1,587**	**-1,381**	**-921**	**-590**	**-538**	**-558**	**-558**	**-620**	**-626**	**-622**	**-722**	**-3,988**	**-7,137**
On-budget	-642	-1,720	-1,485	-1,029	-721	-684	-711	-710	-765	-761	-747	-834	-4,630	-8,446
Off-budget[a]	183	133	104	108	131	146	152	151	145	136	125	111	642	1,310
Debt Held by the Public at the End of the Year	5,803	7,612	8,868	9,782	10,382	10,870	11,439	11,986	12,581	13,174	13,611	14,324	n.a.	n.a.
							As a Percentage of Gross Domestic Product							
Total Revenues	17.7	14.9	15.7	18.1	19.1	19.4	19.6	19.9	19.9	20.0	20.1	20.2	18.5	19.3
Total Outlays	21.0	26.1	25.2	24.3	22.8	22.6	22.9	22.9	23.2	23.2	23.2	23.6	23.5	23.4
Total Deficit	**-3.2**	**-11.2**	**-9.6**	**-6.1**	**-3.7**	**-3.2**	**-3.2**	**-3.1**	**-3.3**	**-3.2**	**-3.1**	**-3.4**	**-5.0**	**-4.0**
Debt Held by the Public at the End of the Year	40.8	53.8	61.4	65.2	65.9	65.5	66.0	66.5	67.1	67.5	67.0	67.8	n.a.	n.a.
Memorandum:														
Gross Domestic Product (Billions of dollars)	14,222	14,140	14,439	14,993	15,754	16,598	17,319	18,019	18,760	19,524	20,308	21,114	79,103	176,828

Source: Congressional Budget Office.

Note: n.a. = not applicable.

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

below the 2008 level (see Summary Table 1). Although CBO anticipates declines in almost all sources of revenue, the decrease is largely attributable to the drop in receipts from individual income taxes (which are expected to fall from 8.1 percent of GDP to 6.5 percent) and corporate income taxes (which are estimated to decline from 2.1 percent of GDP to 1.0 percent).

Outlays will rise by about $700 billion this year, in CBO's estimation. Much of that increase results from legislation enacted in calendar year 2008 in response to turmoil in the housing and financial markets—in particular, $133 billion for the Troubled Asset Relief Program (TARP) and $291 billion for the estimated costs of placing Fannie Mae and Freddie Mac into conservatorship. CBO expects that total spending in 2009 from funding provided by the American Recovery and Reinvestment Act (ARRA, Public Law 111-5) will reach about $115 billion.

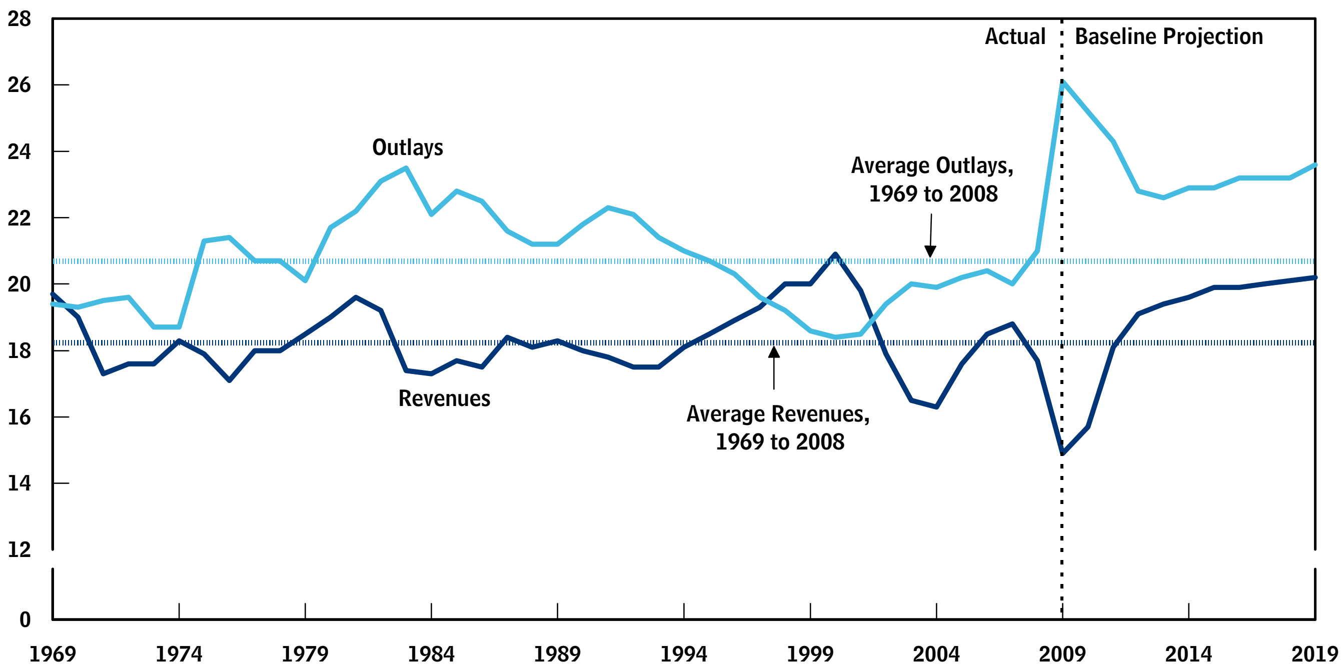
Since it last issued baseline projections in March, CBO has reduced its estimate of the deficit for 2009 by $80 billion. Both outlays and revenues are now expected to be lower in the current year than previously estimated, by $165 billion and $85 billion, respectively. A large drop (of $203 billion) in the estimated subsidy cost of the TARP dominates the change in projected outlays for 2009; other changes (mostly in revenues) offset much of that decrease.

CBO has also updated its baseline projections for the coming decade. In accordance with long-standing procedures, CBO's projections assume that current laws and

Summary Figure 1.

Total Revenues and Outlays

(Percentage of gross domestic product)



Source: Congressional Budget Office based on data from the Office of Management and Budget.

policies remain in place.[1] The resulting baseline is therefore not intended to be a prediction of future budgetary outcomes; rather, it serves as a benchmark that lawmakers can use to measure the effects of spending or revenue proposals.

As the economy improves and spending related to the financial rescue and the economic stimulus package tails off, the deficit is projected to gradually diminish; by 2013, it would amount to 3.2 percent of GDP (about the same level as in 2008), under the assumption that various tax provisions expire as scheduled and that discretionary spending rises at the rate of inflation. Between 2013 and 2019, deficits are projected to range from 3.1 percent to 3.4 percent of GDP, well above the 2.4 percent of GDP that they have averaged over the past 40 years.

1. Exceptions exist for discretionary funding provided in ARRA, as well as for certain mandatory programs—primarily those established on or before the date the Balanced Budget Act of 1997 was enacted—and for expiring excise taxes that are dedicated to trust funds.

Outlays are projected to inch down each year from 2010 to 2012 as spending under ARRA concludes and as the anticipated economic recovery allows payments for unemployment compensation and other benefit programs to return to more typical levels. Total spending is projected to head up again beginning in 2013, with outlays for Medicare, Medicaid, and Social Security contributing significantly to that growth. Over the 2010–2019 period, under the assumptions for CBO's baseline, total outlays would average 23.4 percent of GDP—higher than the 20.7 percent of GDP that federal spending has averaged over the past 40 years (see Summary Figure 1).

Revenues are projected to rise from 14.9 percent of GDP this year to 15.7 percent in 2010. Then, in CBO's baseline, projected revenues increase sharply with the expiration of provisions 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. By 2012, revenues in the baseline reach 19.1 percent of GDP. Because of the structure of the individual income tax, projected revenues rise slowly thereafter relative to the size of the economy, reaching 20.2 percent of GDP by 2019. By comparison, federal revenues have averaged 18.3 percent of GDP over the past 40 years.

Debt held by the public is projected to exceed 61 percent of GDP by the end of next year, which is the highest level since 1952, and reach 68 percent by the end of 2019. That accumulating federal debt, coupled with rising interest rates, would lead to a near tripling of net interest payments (relative to the size of the economy) between 2009 and 2019.

Since March, projected deficits over the 2010–2019 period have risen by $2.7 trillion. About half of the increase is the result of assuming that appropriations in each year include an additional $106 billion (with adjustments for inflation) to reflect the supplemental appropriations that were enacted in June (mostly to finance military operations in Iraq and Afghanistan); that approach is in accordance with rules governing projections of discretionary spending in the baseline. Reductions in projected revenues and increases in interest costs account for most of the remaining difference.

The Economic Outlook

CBO anticipates that economic activity will begin to rebound in the second half of 2009, largely the result of fiscal stimulus provided under ARRA, improving conditions in the financial markets, slower declines in both residential and business investment, and a slowing in the rate at which inventories are being drawn down. However, a number of forces are expected to restrain growth for some time: Economies worldwide remain weak, financial markets continue to be strained, and households will want to restrain spending in order to rebuild their savings. Moreover, experience suggests that recovery from recessions triggered by financial crises and sharp drops in the value of assets tends to be protracted; CBO's forecast reflects that experience.

Specifically, CBO estimates positive economic growth during the second half of calendar year 2009, at an annual rate of 1.6 percent, following declines at an annual rate of 6.4 percent in the first quarter and 1.0 percent in the second quarter. In CBO's forecast, real GDP grows by 2.8 percent between the fourth quarter of 2009 and the fourth quarter of 2010, by 3.8 percent in 2011, and by an average of 4.5 percent in 2012 and 2013 (see Summary Table 2). With the economy functioning well below its potential level, inflation is projected to remain very low; the consumer price index for all urban consumers (CPI-U), with food and energy prices excluded, is expected to increase by 1.6 percent this year, by 1.1 percent in 2010, and by 1.0 percent in 2011 (as measured by the change in the index from the fourth quarter of one year to the fourth quarter of the next year).

Despite the anticipated turnaround in economic growth, at least several more months of declines in employment are anticipated, albeit at a slower pace than in the first half of this year. Hiring usually lags behind the initial stages of a recovery because firms tend to increase output by first boosting the number of hours that existing employees work, and their productivity, and only later by adding employees. In addition, the unemployment rate tends to lag behind the turning point because the number of people seeking work tends to rebound faster than employment. In CBO's forecast, the unemployment rate continues to rise, climbing from 9.3 percent this year to an average of 10.2 percent next year (peaking at 10.4 percent around the middle of the year), and then falls to 9.1 percent in 2011.

Interest rates are expected to remain at historically low levels for the next few years. In CBO's forecast, the interest rate on 3-month Treasury bills averages 0.2 percent in 2009 and 0.6 percent and 1.7 percent in 2010 and 2011, respectively; the rate on 10-year Treasury notes averages 3.3 percent in 2009, 4.1 percent in 2010, and 4.4 percent in 2011.

Between 2014 and 2019, CBO's projections indicate real growth that averages 2.4 percent and CPI-U inflation that averages 1.9 percent. By the agency's estimates, the unemployment rate will average 4.8 percent during the 2014–2019 period, and the interest rate on 3-month Treasury bills will average 4.7 percent and the rate on 10-year Treasury notes will average 5.5 percent.

The Long-Term Budget Outlook

Over the long term (beyond the 10-year baseline projection period), the budget remains on an unsustainable path. Unless changes are made to current policies, the nation will face a growing demand for budgetary resources caused by rising health care costs and the aging of the population. Continued large deficits and the resulting increases in federal debt over time would reduce long-term economic growth by lowering national saving

Summary Table 2.

CBO's Economic Projections for Calendar Years 2009 to 2019

	Forecast			Projected Annual Average	
	2009	2010	2011	2012–2013	2014–2019
	Fourth Quarter to Fourth Quarter (Percentage change)				
Real GDP	-1.0	2.8	3.8	4.5	2.4
GDP Price Index	1.6	0.9	0.3	0.7	1.6
PCE Price Index	1.2	1.1	0.8	0.8	1.6
Core PCE Price Index[a]	1.7	0.8	0.5	0.7	1.6
Consumer Price Index[b]	0.8	1.5	1.2	1.1	1.9
Core Consumer Price Index[a]	1.6	1.1	1.0	1.2	1.9
	Calendar Years				
Nominal GDP					
Billions of dollars	14,163	14,570	15,146	16,799 [c]	21,320 [d]
Percentage change	-0.7	2.9	4.0	5.3	4.1
Unemployment Rate (Percent)	9.3	10.2	9.1	6.4	4.8
Interest Rates (Percent)					
Three-month Treasury bills	0.2	0.6	1.7	3.6	4.7
Ten-year Treasury notes	3.3	4.1	4.4	4.8	5.5

Source: Congressional Budget Office.

Notes: GDP = gross domestic product; PCE = personal consumption expenditure.

The dollar values for nominal GDP and the tax bases are derived from data from the national income and product accounts that were available at the end of June 2009 and do not reflect the July revisions. Economic projections for each year from 2009 to 2019 are available at www.cbo.gov/spreadsheets.shtml.

a. Excludes prices for food and energy.

b. The consumer price index for all urban consumers.

c. Level in 2013.

d. Level in 2019.

and investment relative to what would otherwise occur, causing productivity and wage growth to gradually slow.

Last year, outlays for Social Security, Medicare, and Medicaid combined accounted for about 9 percent of GDP. Outstripping the growth of GDP, spending for those programs is expected to rise rapidly over the next 10 years, totaling nearly 12 percent of GDP by 2019. Under long-term projections recently published by CBO, such spending would continue to rise under current laws and policies and could total 17 percent of GDP by 2035.[2]

If outlays for those programs reached that level, federal spending would be well above its historical percentage of GDP. Unless revenues were increased correspondingly, annual deficits would climb and federal debt would grow significantly, posing a threat to the economy. Alternatively, if taxes were raised to finance the rising spending, tax rates would have to reach levels never seen in the United States. Some combination of significant changes in benefit programs and other spending and tax policies will be necessary in order to attain long-term fiscal balance.

2. See Congressional Budget Office, *The Long-Term Budget Outlook* (June 2009).

CHAPTER

1

The Budget Outlook

The Congressional Budget Office (CBO) estimates that the federal budget deficit for this fiscal year will total $1.6 trillion, or 11.2 percent of gross domestic product (GDP). That large deficit reflects the combination of weak revenues and elevated spending associated with the current recession, including the costs for the significant interventions in the financial markets undertaken by the government. CBO's new estimate of the 2009 deficit is about $80 billion (or 5 percent) lower than what the agency anticipated in March.[1] Tax revenues are now expected to be $85 billion lower than CBO projected earlier this year, but that decrease in revenues is more than offset by lower outlays. The decrease in outlays stems primarily from changes in the implementation of the Troubled Asset Relief Program (TARP). The net budgetary cost of the TARP will total $133 billion in 2009, CBO expects, approximately $200 billion lower than the estimate prepared in March.

In spite of the slightly lower estimate of the 2009 deficit, the federal fiscal situation remains grim. As a percentage of GDP, the projected deficit for this year would be nearly twice as large as the previous post-World War II-era record of 6.0 percent in 1983. Under CBO's baseline, which assumes that no changes to current laws and policies occur, the annual deficit would drop markedly—to 9.6 percent of GDP in 2010, to 6.1 percent of GDP in 2011, and to 3.7 percent of GDP in 2012, the first full fiscal year after certain tax provisions originally enacted in 2001, 2003, and 2009 are scheduled to expire (see Table 1-1). For the balance of the 10-year projection period (through 2019), deficits under CBO's baseline are projected to range between 3.1 percent and 3.4 percent of GDP (see Figure 1-1).

1. CBO's previous projections were included in Congressional Budget Office, *A Preliminary Analysis of the President's Budget and an Update of CBO's Budget and Economic Outlook* (March 2009).

Debt held by the public is expected to total $7.6 trillion by the end of this year. As a percentage of GDP, such debt would be about one-third larger than it was at the end of 2008, rising from 41 percent to 54 percent. Although projected deficits would decline relative to the size of the economy, they would remain substantial, and debt held by the public would be growing as a percentage of GDP over the 10-year period. Under the assumptions that govern the baseline, debt held by the public would rise to 68 percent of GDP by 2019, the highest percentage since 1950 (see Table 1-2).

CBO's current estimate of the cumulative deficit under baseline assumptions over the 2010–2019 projection period now stands at $7.1 trillion, about $2.7 trillion higher than the 10-year deficit CBO projected in March. Roughly half of that change is attributable to legislative action that has occurred in the past few months. In particular, the extrapolation of recently enacted supplemental funding (that is, the assumption that the same amount of funding, adjusted for inflation, is provided in future years) raises the projected deficit by $1.3 trillion (including debt-service costs). Technical changes—mostly involving reductions in revenues and increases in interest costs—account for another $1.1 trillion increase in the 10-year deficit projection. Revisions to CBO's economic assumptions have increased the baseline deficit by $0.2 trillion over the 2010–2019 period. (Those changes to CBO's baseline projections are discussed in greater detail in Appendix A).

CBO's baseline projections do not incorporate potential changes in policy. Thus, they serve as a neutral benchmark that legislators and others can use to assess the potential effects of policy decisions. CBO's projections, therefore, assume that various tax provisions will expire as

Table 1-1.

Projected Deficits and Surpluses in CBO's Baseline

(Billions of dollars)

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
On-Budget Deficit	-642	-1,720	-1,485	-1,029	-721	-684	-711	-710	-765	-761	-747	-834	-4,630	-8,446
Off-Budget Surplus[a]	183	133	104	108	131	146	152	151	145	136	125	111	642	1,310
Total Deficit	**-459**	**-1,587**	**-1,381**	**-921**	**-590**	**-538**	**-558**	**-558**	**-620**	**-626**	**-622**	**-722**	**-3,988**	**-7,137**
Memorandum:														
Total Deficit as a Percentage of GDP	-3.2	-11.2	-9.6	-6.1	-3.7	-3.2	-3.2	-3.1	-3.3	-3.2	-3.1	-3.4	-5.0	-4.0
Debt Held by the Public as a Percentage of GDP[b]	40.8	53.8	61.4	65.2	65.9	65.5	66.0	66.5	67.1	67.5	67.0	67.8	n.a.	n.a.
Net Subsidy Costs for Fannie Mae and Freddie Mac as Government Entities Included in Baseline Projections	0	291	26	21	16	14	5	4	3	3	3	3	82	99
Cash Infusions from the Treasury to Fannie Mae and Freddie Mac[c]	0	112	25	17	8	1	0	0	0	0	0	0	51	51
Projected Deficits if Fannie Mae and Freddie Mac Were Not Included in the Budget as Government Entities	-459	-1,409	-1,380	-917	-582	-525	-553	-554	-617	-623	-619	-719	-3,957	-7,089

Source: Congressional Budget Office.

Note: GDP = gross domestic product; n.a. = not applicable; Fannie Mae = Federal National Mortgage Association; Freddie Mac = Federal Home Loan Mortgage Corporation.

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

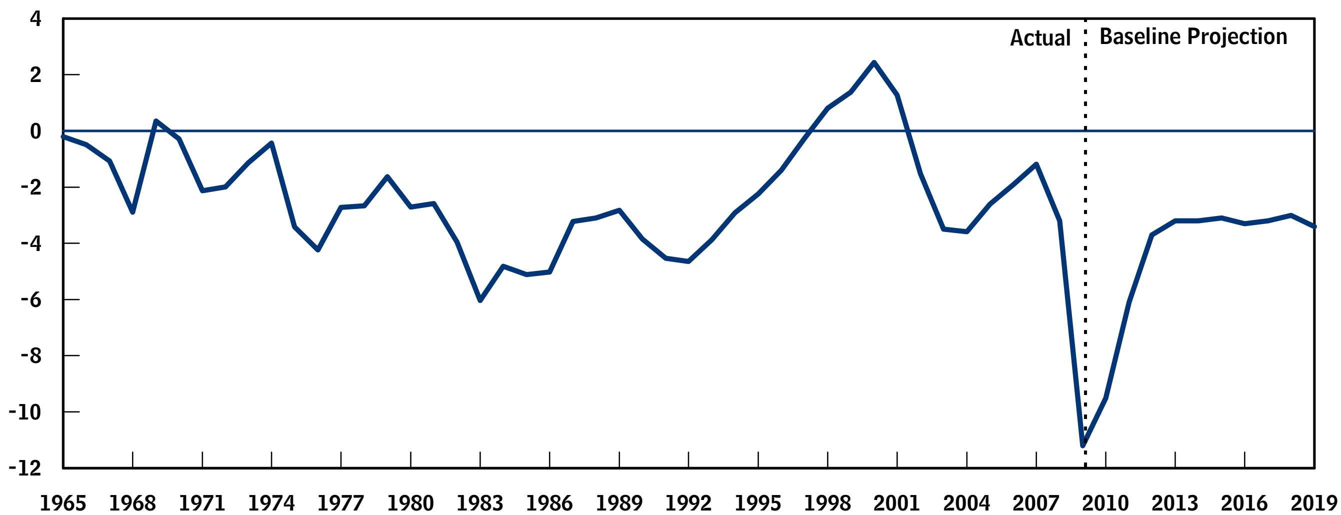
b. Debt held at the end of the year.

c. Under CBO's proposed treatment of showing the government-sponsored enterprises (GSEs) within the budget, the cash equity injections from the Treasury to the GSEs would be intragovernmental transfers. The injections represent the primary cash flows from the Treasury to the GSEs.

Figure 1-1.

The Total Deficit or Surplus

(Percentage of gross domestic product)



Source: Congressional Budget Office.

scheduled, boosting revenues substantially.[2] Similarly, the baseline also includes the assumption that reductions in Medicare payments for physicians' services will occur as called for in current law. In addition, the baseline projections assume that most discretionary spending will continue at the same level as that most recently enacted by the Congress, with annual adjustments for inflation.[3]

To indicate the potential effects of some possible policy changes, CBO has prepared various alternative scenarios to its baseline estimates. For example, if all expiring tax provisions, including those in the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), and the American Recovery and Reinvestment Act of 2009 (ARRA), were extended and the alternative minimum tax (AMT) was indexed for inflation, revenues would average 16.8 percent of GDP over the next 10 years rather than the 19.3 percent projected in the baseline, and deficits would be more than $6 trillion higher over the 2010–2019 period. In contrast, if funding for ongoing operations in Iraq and Afghanistan and for other war-related activities was assumed to decline rather than grow with inflation, deficits over the coming decade would be around $1 trillion lower than those projected in CBO's baseline.

Significant challenges loom beyond the 10 years covered by the current projection period. Under current law, the costs of Social Security, Medicare, and Medicaid are projected to grow at a robust pace. Unless revenues increased just as rapidly, the rise in spending would produce growing budget deficits and accumulating debt. Keeping deficits and debt from reaching levels that would cause substantial harm to the economy would require increasing revenues significantly as a percentage of GDP, decreasing projected spending sharply, or some combination of the two.

2. The provisions, most of which were originally enacted in 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, are scheduled to expire at the end of December 2010. The assumption that those expirations will occur as scheduled contributes to revenue growth of about 15 percent between 2010 and 2012 in CBO's baseline projections.

3. With the agreement of the House and Senate Budget Committees, CBO's baseline does not extrapolate the $283 billion in discretionary funding that was originally provided in the American Recovery and Reinvestment Act of 2009.

Table 1-2.

CBO's Baseline Budget Projections

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
							In Billions of Dollars							
Revenues														
Individual income taxes	1,146	918	984	1,314	1,478	1,617	1,729	1,841	1,948	2,062	2,169	2,282	7,122	17,425
Corporate income taxes	304	142	199	271	313	320	333	344	354	367	383	394	1,437	3,279
Social insurance taxes	900	889	906	944	1,012	1,073	1,121	1,162	1,198	1,234	1,275	1,321	5,055	11,245
Other revenues	174	152	175	188	207	210	220	230	238	245	254	262	1,000	2,229
Total Revenues	**2,524**	**2,100**	**2,264**	**2,717**	**3,010**	**3,221**	**3,403**	**3,577**	**3,737**	**3,908**	**4,081**	**4,260**	**14,614**	**34,177**
On-budget	1,866	1,447	1,607	2,038	2,289	2,458	2,606	2,748	2,877	3,014	3,152	3,295	10,998	26,084
Off-budget	658	653	657	679	721	762	797	829	860	894	929	965	3,616	8,093
Outlays														
Mandatory spending	1,595	2,270	2,070	2,027	1,961	2,038	2,127	2,219	2,365	2,469	2,580	2,776	10,222	22,630
Discretionary spending	1,135	1,241	1,378	1,370	1,343	1,347	1,358	1,374	1,401	1,424	1,448	1,484	6,797	13,929
Net interest	253	177	196	240	296	374	476	542	592	640	675	722	1,583	4,754
Total Outlays	**2,983**	**3,688**	**3,644**	**3,638**	**3,600**	**3,759**	**3,961**	**4,135**	**4,358**	**4,534**	**4,703**	**4,982**	**18,602**	**41,314**
On-budget	2,508	3,168	3,091	3,067	3,009	3,143	3,317	3,458	3,642	3,776	3,898	4,128	15,627	34,530
Off-budget	475	520	553	571	590	616	644	678	715	758	804	854	2,974	6,784
Deficit (-) or Surplus	**-459**	**-1,587**	**-1,381**	**-921**	**-590**	**-538**	**-558**	**-558**	**-620**	**-626**	**-622**	**-722**	**-3,988**	**-7,137**
On-budget	-642	-1,720	-1,485	-1,029	-721	-684	-711	-710	-765	-761	-747	-834	-4,630	-8,446
Off-budget	183	133	104	108	131	146	152	151	145	136	125	111	642	1,310
Debt Held by the Public	5,803	7,612	8,868	9,782	10,382	10,870	11,439	11,986	12,581	13,174	13,611	14,324	n.a.	n.a.
Memorandum:														
Gross Domestic Product	14,222	14,140	14,439	14,993	15,754	16,598	17,319	18,019	18,760	19,524	20,308	21,114	79,103	176,828
							As a Percentage of Gross Domestic Product							
Revenues														
Individual income taxes	8.1	6.5	6.8	8.8	9.4	9.7	10.0	10.2	10.4	10.6	10.7	10.8	9.0	9.9
Corporate income taxes	2.1	1.0	1.4	1.8	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9
Social insurance taxes	6.3	6.3	6.3	6.3	6.4	6.5	6.5	6.4	6.4	6.3	6.3	6.3	6.4	6.4
Other revenues	1.2	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.3
Total Revenues	**17.7**	**14.9**	**15.7**	**18.1**	**19.1**	**19.4**	**19.6**	**19.9**	**19.9**	**20.0**	**20.1**	**20.2**	**18.5**	**19.3**
On-budget	13.1	10.2	11.1	13.6	14.5	14.8	15.0	15.3	15.3	15.4	15.5	15.6	13.9	14.8
Off-budget	4.6	4.6	4.6	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Outlays														
Mandatory spending	11.2	16.1	14.3	13.5	12.4	12.3	12.3	12.3	12.6	12.6	12.7	13.1	12.9	12.8
Discretionary spending	8.0	8.8	9.5	9.1	8.5	8.1	7.8	7.6	7.5	7.3	7.1	7.0	8.6	7.9
Net interest	1.8	1.2	1.4	1.6	1.9	2.3	2.8	3.0	3.2	3.3	3.3	3.4	2.0	2.7
Total Outlays	**21.0**	**26.1**	**25.2**	**24.3**	**22.8**	**22.6**	**22.9**	**22.9**	**23.2**	**23.2**	**23.2**	**23.6**	**23.5**	**23.4**
On-budget	17.6	22.4	21.4	20.5	19.1	18.9	19.1	19.2	19.4	19.3	19.2	19.6	19.8	19.5
Off-budget	3.3	3.7	3.8	3.8	3.7	3.7	3.7	3.8	3.8	3.9	4.0	4.0	3.8	3.8
Deficit (-) or Surplus	**-3.2**	**-11.2**	**-9.6**	**-6.1**	**-3.7**	**-3.2**	**-3.2**	**-3.1**	**-3.3**	**-3.2**	**-3.1**	**-3.4**	**-5.0**	**-4.0**
On-budget	-4.5	-12.2	-10.3	-6.9	-4.6	-4.1	-4.1	-3.9	-4.1	-3.9	-3.7	-3.9	-5.9	-4.8
Off-budget	1.3	0.9	0.7	0.7	0.8	0.9	0.9	0.8	0.8	0.7	0.6	0.5	0.8	0.7
Debt Held by the Public	40.8	53.8	61.4	65.2	65.9	65.5	66.0	66.5	67.1	67.5	67.0	67.8	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

Revenues, Outlays, and the Budget Deficit for 2009

Both in dollar terms and in relation to the size of the economy, the imbalance in the budget projected for 2009 is significantly larger than at any time since World War II. At $1.6 trillion, the expected deficit for this year will be nearly three and a half times the size of last year's deficit of $459 billion. As a percentage of GDP, the 2009 deficit will be almost twice as large as any deficit in the past 60 years.

Compared with revenues in 2008, revenues this year are projected to fall by more than $400 billion (a drop of about 17 percent). The expected rise in outlays is even more striking: At $3.7 trillion, they will be about $700 billion (or 24 percent) higher than they were last year. That projected spending increase includes CBO's estimate of the costs of federal subsidies provided through the TARP ($133 billion) and of the government's conservatorship of the two largest government-sponsored housing enterprises, Fannie Mae and Freddie Mac ($291 billion).[4] (No costs for those two components of this year's estimated outlays were included in the 2008 totals.)

Revenues

On the basis of tax collections through July 2009, CBO expects federal revenues to total $2.1 trillion this year. The recession explains most of the drop in revenues from last year. Provisions enacted since the beginning of 2008, which reduced taxes in a number of ways, account for roughly one-seventh of the decline.

CBO expects that federal revenues as a share of GDP will total 14.9 percent in 2009, almost 3 percentage points lower than in 2008 and the smallest share since 1950. The decline is largely attributable to the drop in receipts from individual income taxes (which are expected to fall from 8.1 percent of GDP in 2008 to 6.5 percent in 2009) and corporate income taxes (which are estimated to fall from 2.1 percent of GDP in 2008 to 1.0 percent this year). CBO anticipates much less pronounced declines in almost all of the other sources of revenue.

Individual Income and Social Insurance Taxes. In combination, receipts from individual income and social insurance taxes are estimated to total $1.8 trillion in 2009, a drop of 12 percent from the previous year. Individual income taxes are anticipated to fall by 20 percent; social insurance taxes, by 1 percent (see Table 1-3). The decline in receipts from individual income taxes stems largely from the sharp drop in nonwage income (such as income from businesses, realized capital gains, interest, dividends, and pensions) that has occurred during the recession. It is also likely that part of the decline in individual income tax receipts is the result of some taxpayers basing their 2008 withholding and estimated payments on their higher income of previous years and then paying much less in final payments (or receiving larger refunds) than originally planned when filing their tax returns in the spring of this year. Recently enacted legislation also contributes slightly to the drop in individual income tax receipts. The dip in social insurance receipts is not nearly as steep as the drop in individual income tax receipts because it results mainly from a decline in wage income that is much smaller than the drop in nonwage income; also, those receipts are not affected by the same factors regarding the timing of payments or by changes in law.

Payments of individual income and social insurance taxes are generally made in two forms:

- As amounts that employers withhold from their employees' paychecks and remit to the federal government on behalf of their employees; and
- As nonwithheld amounts that individuals pay directly, either in the form of quarterly estimated installments or as final payments made when they file their yearly income tax returns.

CBO expects that withholding for combined income and payroll taxes will decline by about 7 percent in 2009 after rising by about 4 percent in 2008 and nearly 7 percent in each of the two previous years. More than one-third of the decline this year results from provisions of ARRA that will reduce withholding throughout the second half of the fiscal year—primarily the Making Work Pay tax credit, which is expected to reduce revenues by about $29 billion in 2009. The provision in ARRA that provides for temporary subsidies for the health insurance premiums of some unemployed workers is estimated to reduce revenues by about $14 billion in 2009. Shrinking wages and salaries explain the remaining two-thirds of the decline in withheld taxes (see Figure 1-2).

4. Fannie Mae is the Federal National Mortgage Association, and Freddie Mac is the Federal Home Loan Mortgage Corporation.

Table 1-3.

Average Annual Growth Rates of Revenues and Outlays Since 1998 and as Projected in CBO's Baseline

(Percent)

	Actual		Estimated	Projected[a]	
	1998 to 2007	2008	2009	2010	2011 to 2019
			Revenues		
Individual Income Taxes	4.7	-1.5	-19.9	7.2	9.8
Corporate Income Taxes	7.3	-17.8	-53.3	40.4	7.9
Social Insurance Taxes	4.9	3.5	-1.3	1.9	4.3
Other Revenues[b]	3.2	5.6	-12.6	15.1	4.6
Total Revenues	**5.0**	**-1.7**	**-16.8**	**7.8**	**7.3**
			Outlays		
Mandatory	6.0	9.9	42.3	-8.8	3.3
Social Security	4.8	5.3	10.8	2.9	5.1
Medicare	7.7	4.6	9.3	3.2	6.9
Medicaid	7.2	5.7	25.6	12.1	4.7
Other mandatory outlays[c]	5.3	34.1	157.9	-31.7	-6.6
Discretionary	6.6	9.1	9.4	11.0	0.8
Defense	7.3	11.8	7.3	5.8	1.5
Nondefense	6.0	6.0	11.8	16.9	0.1
Net Interest	-0.3	6.6	-30.1	11.2	15.6
Total Outlays	**5.5**	**9.3**	**23.6**	**-1.2**	**3.5**
Total Outlays Excluding Net Interest	6.3	9.6	28.6	-1.8	2.4
Memorandum:					
Consumer Price Index	2.5	4.4	-0.3	1.6	1.6
Nominal GDP	5.2	4.3	-0.6	2.1	4.3
Discretionary Budget Authority	7.7	10.0	26.9	-17.0	1.7
Defense	8.9	10.2	1.3	0.0	1.7
Nondefense	6.3	9.7	62.6	-31.7	1.7

Source: Congressional Budget Office.

Notes: The growth rates in this table do not account for shifts in the timing of certain payments or receipts.

GDP = gross domestic product.

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 GDP price index to adjust other discretionary spending.

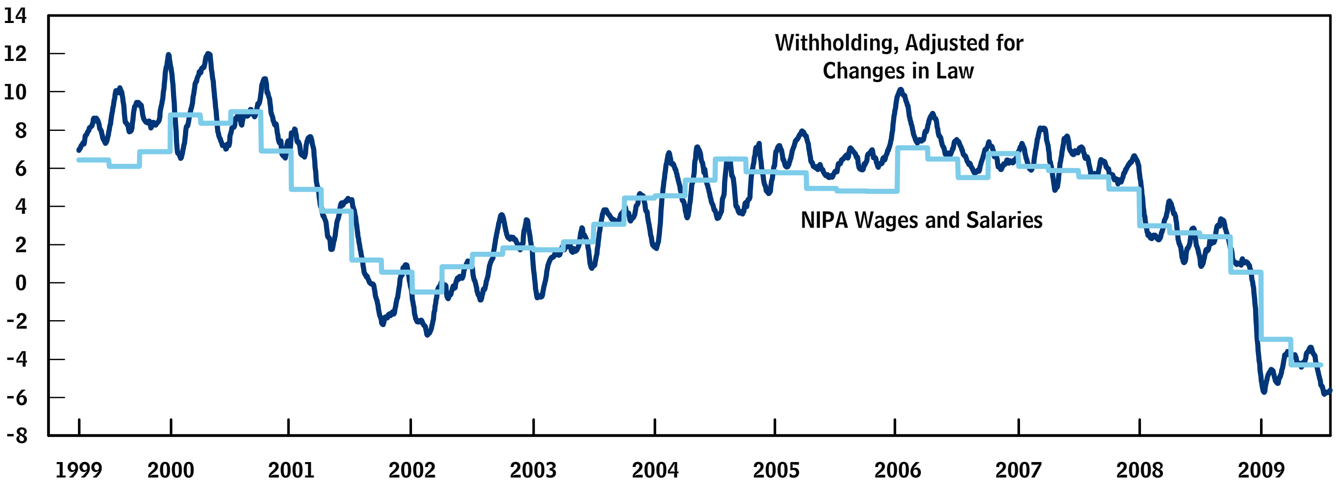
b. Includes excise taxes, estate and gift taxes, customs duties, and miscellaneous receipts.

c. 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).

Figure 1-2.

Daily Tax Withholding and Quarterly Wages and Salaries

(Percentage change from previous year)



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

Note: Daily tax withholding is a moving average adjusted for changes in law from July 2001 to July 2004, and March 2009 to the present. Data on wages and salaries are as reported in the national income and product accounts (NIPAs). The data shown begin in April 1999.

Nonwithheld receipts of income and payroll taxes are expected to fall by about 29 percent this year. (They increased by 4 percent in 2008 and by more than 12 percent in 2007.) Quarterly estimated payments are projected to fall by 24 percent, and final payments are expected to decline by 32 percent. The steep slide in such tax receipts probably stems in large part from a substantial drop in nonwage income in 2008, including realized capital gains. Excluding the effects of the rebates provided in last year's economic stimulus package, most of which were paid in 2008, refunds of income taxes are projected to rise by about 13 percent in 2009. Data from individual income tax returns that show the sources of income that fell in 2008 will become available starting later this calendar year.

Corporate Income Taxes. CBO expects corporate income tax receipts to fall from $304 billion in 2008 to $142 billion in 2009, a drop of 53 percent. Such receipts also declined, by almost 18 percent, in 2008; in contrast, from 2003 to 2007, they grew by about 30 percent a year, on average.

Declining corporate profitability has reduced corporate income tax receipts in two ways. First, many profitable firms are less profitable and therefore owe less in taxes; second, newly unprofitable firms are receiving refunds of prior years' taxes because they can use current losses to offset prior years' tax liabilities. However, corporate income tax receipts have fallen much more sharply than have profits. Domestic economic profits, as measured in the national income and product accounts (NIPAs), are projected to fall by about 14 percent this calendar year, following a 16 percent decline in 2008. Several factors could be causing corporate income tax receipts to fall more than domestic economic profits have fallen. One factor is that the NIPA measures of profits do not reflect deductions for bad debts, which include loans that businesses make that they can no longer collect. Those bad debts are presumably much larger than usual because of the financial market turmoil and the recession. Another factor is that the NIPA measures exclude capital gains realizations of corporations, which CBO expects have dropped markedly as a result of the economic downturn and decline in the stock market. Pinpointing the causes of falling receipts will not be possible until detailed data from tax returns start to become available next year.

Outlays

Outlays for 2009 are projected to total $3.7 trillion—about $700 billion higher than the amount recorded last year. At that level, federal outlays would equal about 26 percent of GDP, significantly higher than the 21 percent share they have averaged over the past 40 years. The

Box 1-1.

The Treatment of Fannie Mae and Freddie Mac in the Federal Budget

On September 6, 2008, exercising authority provided by the Housing and Economic Recovery Act of 2008 (Public Law 110-289), the director of the Federal Housing Finance Agency and the Secretary of the Treasury placed the government-sponsored enterprises (GSEs) Fannie Mae (the Federal National Mortgage Association) and Freddie Mac (the Federal Home Loan Mortgage Corporation) into conservatorship.[1] The Treasury received rights to majority ownership in exchange for any future contributions necessary to keep the GSEs solvent. The support agreements between the Treasury and the GSEs include several forms of compensation for the Treasury—most notably, warrants to purchase common stock that, if exercised, would represent an ownership stake of 79.9 percent of each enterprise.

Although the GSEs have had a unique legal status and a long history linking them closely to the federal government, they had been considered private firms owned by their shareholders. However, because of the extraordinary degree of management and financial control that the government now exercises over them, the Congressional Budget Office (CBO) concluded that the entities should be considered federal operations. Although the GSEs are not legally government agencies and their employees are not civil servants, CBO believes—consistent with the principles outlined in the 1967 *Report of the President's Commission on Budget Concepts*—that it is appropriate and useful to policymakers to account for and display the GSEs' financial transactions alongside other federal activities in the budget.

Beginning in 2009, CBO is accounting for the GSEs' operations in its budget projections by computing the present value of anticipated cash flows using an appropriate discount factor that recognizes the riskiness of those cash flows. On the basis of projections of the entities' assets and liabilities over the long term, CBO estimates that including their operations in the budget will increase the federal deficit by $291 billion this year and by about $100 billion cumulatively between 2010 and 2019.

1. 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.

Continued

increase in spending from 2008 is overwhelmingly for mandatory programs, and most of it is tied to legislation enacted in 2008 in response to turmoil in the housing and financial markets and early in 2009 as part of ARRA.

Mandatory Spending. Outlays this year for mandatory programs are projected to be $675 billion (42 percent) higher than they were in 2008. (In general, mandatory spending is governed by statutory criteria and is not constrained by the annual appropriation process.) At $2.3 trillion, they will constitute about 16 percent of GDP. Costs for the TARP and support of Fannie Mae and Freddie Mac contribute $424 billion to CBO's estimate of mandatory outlays in 2009.[5] In particular, CBO has calculated the net cost of taking on Fannie Mae's and Freddie Mac's portfolios of mortgage loans and has recorded a total of $291 billion in outlays for 2009 (see Box 1-1). Similarly, CBO has estimated the net cost to the federal government of the TARP's activities this year, which results in projected outlays of $133 billion to be recorded for 2009.[6] That amount is about $200 billion lower than the net cost that CBO estimated earlier this year. The revision, which is discussed in greater detail in Appendix A, reflects updated market conditions, revised assumptions about the timing of purchases made under the TARP's authority, and the likelihood that, in CBO's

5. CBO's calculations related to Fannie Mae and Freddie Mac, as well as those for the TARP, are made by estimating the present value of all future cash flows, including an adjustment for market risk.

6. In June 2009, CBO published *The Troubled Asset Relief Program: Report on Transactions Through June 17, 2009,* which provided an update on purchases and repayments made under that program's authority.

Box 1-1. Continued

The Treatment of Fannie Mae and Freddie Mac in the Federal Budget

In CBO's baseline, most of the cost recorded in 2009 stems from the existing assets and liabilities of the GSEs at the time of their takeover. CBO estimates that the value of the GSEs' mortgage loans and other assets fell short of their liabilities by $248 billion (on a present-value basis); that amount is included in CBO's calculation of the deficit for 2009. Additional costs shown on the budget stem from the GSEs' new business after the takeover. Nearly $43 billion in 2009 and smaller amounts thereafter represent the estimated annual subsidy costs of that new activity. The combined subsidy rate for both GSEs' credit activities is estimated to be about 2.7 percent in 2009 and to decline to about 0.2 percent after 2014. The decline in the subsidy rate reflects CBO's expectation that housing and mortgage markets will stabilize over that period.

Separately from the subsidy costs, CBO also estimates the cash infusions, which are the primary cash flows between the Treasury and the GSEs, that are necessary to shore up the balance sheets of the entities. Fannie Mae and Freddie Mac release quarterly financial statements that provide details on their gains and losses. Estimated net losses for the GSEs determine the size of cash infusions provided to those entities by the Treasury. Thus far, the Treasury has provided $85 billion in such infusions. CBO estimates that such transfers will total in the vicinity of $100 billion in 2009 and $50 billion between 2010 and 2015. Because CBO now considers the GSEs' activities part of the federal budget, the anticipated cash infusions from the Treasury are essentially intragovernmental transfers that have no net effect on the budget.

In contrast, the Administration has continued to consider Fannie Mae and Freddie Mac to be nongovernmental entities for federal budgeting purposes. Under such a treatment of the GSEs, the cash infusions are recorded as outlays from the Treasury. If CBO adopted that methodology, outlays related to those GSEs would total about $100 billion in 2009 (the amount of the cash infusions estimated for that year) rather than the $291 billion charge that CBO's baseline assumes. (The estimated subsidy costs and cash infusions related to the GSEs are shown in Table 1-1 on page 2.)

estimation, the Treasury will not use its full authority of $699 billion.[7]

Outlays for unemployment compensation are expected to soar by $73 billion this year to $116 billion. About half of that increase stems from a near doubling of regular benefit payments (the first 26 weeks of compensation that states pay to qualified individuals) as the result of rising unemployment rates. In addition, legislation first enacted in July 2008 and subsequently amended also contributes to the increase in outlays by temporarily boosting benefits by $25 per week and extending the number of weeks for which an individual can continue to draw unemployment benefits. Currently, unemployed individuals in states with high unemployment rates may qualify for up to 79 weeks of benefits.

Spending for the three largest mandatory programs—Social Security, Medicare, and Medicaid—is expected to increase at a faster-than-normal pace this year. CBO estimates that outlays for Social Security will rise by 11 percent, or about twice the rate of last year's increase. Much of that jump results from the 5.8 percent cost-of-living adjustment that beneficiaries received in January (the highest since 1982). Caseloads also rose at a faster clip as baby boomers, the first of whom became eligible for Social Security benefits last year, continue to enter the rolls. The remainder of the increase in Social Security outlays stems from one-time payments (totaling $13 billion in 2009) made to beneficiaries under ARRA. (More

7. Authority for the TARP was originally set to a maximum of $700 billion; however, that amount was reduced by $1.3 billion in the Helping Families Save Their Homes Act of 2009 (Public Law 111-22).

Box 1-2.

An Update on the Budgetary Effects of the American Recovery and Reinvestment Act

In February 2009, the Congressional Budget Office (CBO) and the Joint Committee on Taxation (JCT) estimated that the American Recovery and Reinvestment Act of 2009 (ARRA, Public Law 111-5) would increase deficits by $787 billion over the 2009–2019 period. About $575 billion of that 11-year total would stem from increased outlays and $212 billion from reduced revenues.[1] For fiscal year 2009, which ends on September 30, CBO estimated that the net impact on the deficit would be $185 billion—a reduction of $65 billion in revenues and an increase of $120 billion in outlays. CBO has not completed a comprehensive update of its original estimate of the stimulus package. Indications to date are that, in total, the budgetary effects have occurred at about the pace CBO anticipated when it prepared its initial estimates.[2]

Results Through July 2009

CBO estimates that the revenue reductions under ARRA and spending of the funds provided by ARRA have amounted to about $130 billion so far this year. The spending increases through July have totaled about $70 billion.[3] Most of the spending to date has occurred in four areas: Medicaid, unemployment compensation, one-time payments of $250 to Social Security recipients, and grants to states for education and other state government expenditures.

The effect of the stimulus legislation on revenues thus far is more difficult to assess because there is no way to identify the effects on receipts of the specific tax provisions in ARRA. The only additional information now available is that the Making Work Pay tax credit was implemented about three months earlier than expected at the time of enactment. Accounting for that change, and on the basis of its original projections, CBO estimates that the specific tax provisions of ARRA have reduced revenues by about $60 billion as of the end of July (excluding any macroeconomic effects of the legislation).[4]

1. JCT estimated most of the revenue impacts of the legislation.
2. Congressional Budget Office, cost estimate for the conference agreement for H.R. 1 (February 13, 2009).
3. Spending under the stimulus legislation is reported by federal agencies at www.recovery.gov and is updated weekly. CBO has adjusted those figures to exclude the effects of intragovernmental transfers.
4. That number includes the reclassification of a tax credit related to extended health insurance benefits provided under the Consolidated Omnibus Budget Reconciliation Act of 1985 (commonly called COBRA). In its original estimate, CBO counted those additional benefits as an outlay. The Administration has been recording them as an offset to tax payments, however, so CBO has reclassified them as a reduction in revenues.

Continued

details on ARRA-related spending are provided in Box 1-2.)

Medicaid spending is up significantly this year as well, rising by an estimated 26 percent from last year's level. Nearly two-thirds of that rise is related to provisions in ARRA that temporarily increase the federal matching rates for payments made to states under the program. (The higher matching rates continue through December 2010.) Spending for Medicare is estimated to grow by 9 percent this year.

Discretionary Spending. Spending subject to appropriation, also called discretionary spending, is now projected to total $1.2 trillion in 2009, a rise of about $100 billion (9 percent) from last year's level. About one-third of that increase in outlays stems from the $283 billion in discretionary funding originally provided for 2009 in ARRA.[8]

8. Public Law 111-47, enacted this summer, provided additional funding for the program known as Cash for Clunkers and covered the cost of that supplemental funding by rescinding $2 billion previously provided in ARRA; thus, net discretionary funding under ARRA has been reduced to $281 billion.

Box 1-2. **Continued**

An Update on the Budgetary Effects of the American Recovery and Reinvestment Act

Revisions to CBO's Initial Estimates

CBO's August 2009 baseline reflects some updates to estimated spending from provisions in ARRA. In total, outlays for 2009 are now projected to be about $5 billion lower than the amount CBO originally estimated. However, that net change includes a reclassification to the revenue side of the budget of about $14 billion in subsidies for the continuation of health care for the unemployed, rather than a reestimate of the cost of those subsidies. In the absence of that reclassification, outlays this year from ARRA authority would be about $9 billion higher, CBO estimates.

Grants to states for education and other purposes have been disbursed faster than initially anticipated; consequently, CBO has raised its estimate of such spending for the full year by $8 billion and lowered it by similar amounts for subsequent fiscal years. In addition, the higher-than-expected unemployment rate has led CBO to raise its estimates of spending in 2009 for ARRA provisions that affect unemployment compensation (by $7 billion) and Medicaid (by $1 billion).

In contrast, many of the large appropriations provided in ARRA have been spent more slowly than anticipated during the first several months after the law's enactment. CBO now expects that outlays in 2009 will fall short of initial estimates in several areas. For example, CBO has reduced its estimate of spending in 2009 by $3 billion for grants for housing projects and by $2 billion for transportation programs. (Such funds will be spent in future years, resulting in a shift of outlays from 2009 to 2010 and later years.)

In developing its original estimate for ARRA, CBO anticipated that some of the spending from the stimulus legislation would affect the rate of spending of regular funding for some programs. (For example, CBO estimated that spending under ARRA for some activities, such as transportation, would result in slower spending from existing budget authority.) But there is no way to know exactly how actual spending for ongoing programs compares with what would have been spent for those programs in the absence of ARRA. Consequently, CBO does not have a revised estimate of ARRA's net impact on spending.

Other than reclassifying subsidies of the costs of continuing health insurance to the revenue side of the budget, CBO has not made significant changes to its estimate of ARRA's effect on revenues for 2009. As a result of the earlier-than-expected implementation of the Making Work Pay tax credit, the projected revenue loss from that provision has been raised by $9 billion for 2009 and reduced by the same amount for 2010.

Also included in the total are the effects of the Supplemental Appropriations Act of 2009 (Public Law 111-32), which was enacted in June and provided additional defense appropriations of $80 billion and nondefense funding of $26 billion for this year. Outlays from those appropriations will amount to $29 billion this year, CBO estimates.

Nondefense discretionary outlays are expected to climb to $584 billion this year—an increase of 12 percent. (About half of that increase is a result of provisions in ARRA.) At that level, nondefense discretionary spending will represent about 4.1 percent of GDP, the highest share since 1983. Defense outlays are anticipated to increase by 7 percent in 2009—slightly below the rate of growth that such outlays have experienced, on average, over the past 10 years. Defense outlays are expected to total $657 billion this year, or 4.6 percent of GDP, the highest share since 1992. (For more details on funding provided for ongoing operations in Iraq and Afghanistan and for other war-related activities, see Box 1-3.)

Net Interest. In contrast to spending increases in other areas of the budget, outlays for net interest will be lower

Box 1-3.

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

Since September 2001, lawmakers have provided a total of $944 billion in budget authority for military and diplomatic operations in Iraq, Afghanistan, and other regions, for some veterans' benefits and services, and for related activities of the Department of Justice (see the table to the right). Appropriations specifically designated for those activities, which averaged about $93 billion a year from 2003 through 2005, rose to $120 billion in 2006 and to $187 billion in 2008, before declining to $154 billion in 2009.

Funding to date for military operations and other defense activities related to the war totals $849 billion, most of which has gone to the Department of Defense (DoD). Lawmakers also provided more than $42 billion to train and equip indigenous security forces in Iraq and Afghanistan.[1] A total of $891 billion has thus been appropriated since September 2001 for military operations in Iraq and Afghanistan and other war-related activities.

In addition, $51 billion has been provided for diplomatic operations and foreign aid to Iraq, Afghanistan, and other countries that are assisting the United States in fighting terrorism. Of that amount, $16 billion was appropriated for the Iraq Relief and Reconstruction Fund.

DoD reports that in 2009, obligations for operations in Iraq and Afghanistan and related activities averaged almost $10 billion per month through May, the last month for which data are available. That rate is about $3 billion less than the average monthly obligations in 2008. Because more than half of the funding for 2009 was provided at the end of June, however, the Congressional Budget Office (CBO) expects that monthly obligations will increase significantly during the last quarter of this fiscal year.

Operation Iraqi Freedom accounts for approximately 74 percent of all reported obligations—down from 80 percent in 2008 and 85 percent in 2007; Operation Enduring Freedom (which refers mainly to operations in and around Afghanistan) accounts for another 26 percent. Additional security missions based in the United States—such as combat air patrols over Washington, D.C., and New York City (known as Operation Noble Eagle)—account for less than 1 percent.

Because most appropriations for operations in Iraq and Afghanistan and for related activities appear in the same budget accounts that record appropriations for DoD's other functions, determining how much has actually been spent for those activities is difficult. CBO estimates that appropriations for those operations resulted in outlays through 2008 of about $575 billion (of which about $140 billion occurred in 2008). Of the funds appropriated for international affairs related to the wars, about $35 billion was spent through 2008, CBO estimates. In total, outlays for operations in Iraq and Afghanistan amounted to roughly $145 billion last year. Outlays in 2009 (which also include spending from prior years' appropriations) could total approximately $160 billion, in CBO's estimation.

1. The $42 billion includes $5 billion provided for Iraqi security forces in 2004 in an appropriation for the Department of State's Iraq Relief and Reconstruction Fund.

Continued

Box 1-3. **Continued**

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

Estimated Appropriations Provided for U.S. Operations in Iraq and Afghanistan and for Other War-Related Activities, 2001 to 2009

(Budget authority, in billions of dollars)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total, 2001-2009
Military Operations and Other Defense Activities										
Iraq[a]	0	0	46	68	53	89	113	134	91	593
Other[b]	14	18	34	21	18	22	39	42	49	256
Subtotal	14	18	80	88	71	111	152	175	139	849
Indigenous Security Forces[c]										
Iraq	0	0	0	5	5	3	6	3	1	23
Afghanistan	0	0	0	0	1	2	7	3	6	19
Subtotal	0	0	0	5	7	5	13	6	7	42
Diplomatic Operations and Foreign Aid										
Iraq	0	0	3	15	1	3	3	2	2	29
Other	*	2	5	2	2	1	2	2	6	21
Subtotal	*	2	8	17	3	4	5	4	8	51
Other Services and Activities[d]										
Iraq	0	0	0	0	*	*	1	1	*	2
Other	0	0	0	0	*	*	*	*	*	1
Subtotal	0	0	0	0	*	*	1	2	*	2
Total Budget Authority	**14**	**19**	**88**	**111**	**81**	**120**	**171**	**187**	**154**	**944**

Source: Congressional Budget Office.

Note: * = between zero and $500 million.

a. CBO estimated funding provided for Operation Iraqi Freedom by allocating funds on the basis of information in budget justification materials from the Department of Defense and in monthly reports on DoD's obligations.

b. Includes Operation Enduring Freedom (in and around Afghanistan), 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 permanently increase the size of the Army and Marine Corps, and other operations. (For fiscal years 2005 through 2009, funding for Operation Noble Eagle has been intermingled with regular appropriations for the Department of Defense; that funding is not included in this table because it cannot be identified separately.)

c. Funding for indigenous security forces, which was appropriated in accounts for diplomatic operations and foreign aid (budget function 150) in 2004 and in accounts for defense (budget function 050) since 2005, is used to train and equip local military and police units in Iraq and Afghanistan.

d. Includes funding for veterans' benefits and services and certain activities of the Department of Justice. Excludes about $2 billion in spending by the Department of Veterans Affairs for medical care, disability compensation, and survivors' benefits for veterans of operations in Iraq and Afghanistan and other war-related activities. That amount is CBO's estimate of spending from regular appropriations for the Department of Veterans Affairs and was not explicitly appropriated for war-related expenses.

in 2009 than they were in 2008. Although the federal government is expected to issue an additional $1.8 trillion of debt this year, its net interest costs are anticipated to drop from $253 billion in 2008 to $177 billion in 2009. Much of that drop results from sharply lower short-term interest rates (the 3-month Treasury rate is expected to average 0.2 percent this year, down from 2.1 percent last year) and lower inflation adjustments for indexed securities. Although debt owed to the public is high by historical standards, the very low interest rates result in net interest costs that are the smallest, as a percentage of GDP, in more than 40 years.

CBO's Baseline Budget Projections for 2010 Through 2019

Under the assumptions that CBO uses to construct its baseline—in particular, that there are no changes to laws governing tax and spending policies—the budget deficit would fall slightly next year, to $1.4 trillion (or 9.6 percent of GDP), but still remain high by historical standards.[9] Revenues would increase modestly in 2010 to $2.3 trillion (or 15.7 percent of GDP), while outlays would remain about the same as they were this year at roughly $3.6 trillion (or 25.2 percent of GDP).

Over the coming years, as the economy improves and spending related to the financial rescue and the economic stimulus package abates, the deficit is projected to gradually shrink; by 2013, it would amount to 3.2 percent of GDP (about the same level as in 2008), under the assumption that various tax provisions expire as scheduled and that discretionary spending rises at the rate of inflation. Between 2013 and 2019, baseline deficits are projected to range from 3.1 percent to 3.4 percent of GDP, higher than the 2.4 percent of GDP that deficits have averaged over the past 40 years.

Debt held by the public as a percentage of GDP will exceed 61 percent by the end of next year under CBO's baseline projections, which is the highest level since 1952, and approach 68 percent by the end of 2019. That accumulating federal debt, coupled with rising interest rates, would lead to a near tripling of net interest payments relative to the size of the economy from 2009 to 2019. Under baseline assumptions, payments for net interest will amount to 3.4 percent of GDP in 2019—about the same level as nondefense discretionary spending in that year and higher than any level recorded since World War II.

Revenues

Receipts will climb from 14.9 percent of GDP in 2009 to 15.7 percent of GDP in 2010, CBO estimates. After 2010, projected revenues increase sharply in the baseline because of the expiration of provisions originally enacted in EGTRRA, JGTRRA, and ARRA. By 2012, revenues in CBO's baseline reach 19.1 percent of GDP. Because of the structure of the individual income tax, projected revenues rise slowly thereafter relative to the size of the economy, reaching 20.2 percent of GDP by 2019. (By comparison, federal revenues have averaged 18.3 percent of GDP over the past 40 years.)

Individual Income Taxes. CBO projects that under current law, individual income tax receipts as a share of GDP will rise from 6.5 percent this year ($918 billion) to 10.8 percent in 2019 (totaling nearly $2.3 trillion). Four factors contribute to the growing share of GDP: the scheduled expiration of various tax provisions after 2010, the rebound in taxable income from sources not included in GDP (such as capital gains and certain retirement income), features of the current tax system that cause revenues to rise faster than income over time, and various effects of the economic recovery.

Scheduled changes in tax rules boost projections of individual income tax receipts relative to GDP over the next decade. Certain tax provisions that were originally enacted in EGTRRA, JGTRRA, and ARRA are scheduled to expire at the end of December 2010, raising projected baseline revenues sharply in 2011 and 2012. The expiration of those provisions will, among other effects, increase statutory tax rates on ordinary income, capital gains, and dividends; narrow the 15 percent tax bracket for people who file jointly; reduce the child tax credit; and discontinue the Making Work Pay credit. The overall effect will be to boost income tax receipts by roughly 1.5 percentage points of GDP between 2010 and 2019, CBO estimates.

The temporarily higher exemption amounts that have mitigated the effects of the alternative minimum tax

9. If the subsidy costs of including Fannie Mae and Freddie Mac in the federal budget were removed from that calculation and replaced with the costs of the cash infusions to those entities—the same budgetary treatment as that used by the Administration—the deficits for 2009 and 2010 would be nearly identical, at $1.4 trillion in each year.

expire at the end of 2009. CBO expects that, in the absence of future legislation, the resulting increase in tax liabilities in 2010 from the AMT will be paid almost entirely in 2011, pushing up receipts relative to GDP by about 0.4 percentage points in that year. (That effect from expiring legislation is distinct from the growing reach of the AMT that would occur even without changes in the exemption amounts, as discussed below.)

Taxable distributions from tax-deferred retirement accounts, such as individual retirement accounts and 401(k) plans, are expected to grow more rapidly than other income as the population ages. Taxation of those sources of retirement income will cause revenues to rise relative to the size of the economy by about 0.5 percentage points over the 2010–2019 period.

Faster growth in capital gains realizations also contributes to the anticipated growth in individual income tax receipts. CBO estimates that the decline in capital gains realizations since 2007 has left capital gains relative to GDP at a level well below their historical average, given the rate at which they are currently taxed. CBO projects that capital gains realizations will rise relative to GDP after 2010, despite the increase in the top tax rate on gains (from 15 percent to 20 percent) scheduled for 2011, as capital gains rebound from their current atypically low level. The rise in capital gains is expected to increase tax revenues relative to the size of the economy by about 0.2 percentage points between 2010 and 2019.

In addition, certain characteristics of the tax code cause effective tax rates—the amount of taxes paid as a percentage of personal income—to increase over time. One characteristic, known as real bracket creep, means that the overall growth of real (inflation-adjusted) income causes more income to be taxed in higher tax brackets. That factor is projected to raise receipts relative to GDP by about 0.8 percentage points over the next 10 years. Moreover, as nominal income rises, the individual AMT will claim a growing share of income.[10] CBO estimates that without changes in law, the AMT will increase tax revenues relative to the size of the economy by about 0.2 percentage points between 2009 and 2019.[11]

Finally, receipts have fallen further than can be explained by the economic data available at the time that CBO's economic projections were prepared, in mid-July. CBO assumes that the unexplained weakness in receipts will gradually dissipate over the next several years. That assumption increases projected tax revenues relative to the size of the economy by 0.2 percentage points between 2009 and 2019.[12]

Other factors cause individual income tax receipts to rise relative to GDP by 0.6 percentage points. Those factors include changes in the income distribution over time that cause effective tax rates to rise and a temporary reduction in revenue in 2009 resulting from overwithholding in tax year 2008.

Corporate Income Taxes. Under current law, corporate income tax receipts as a percentage of GDP will rise from 1.0 percent this year to 1.4 percent in 2010, CBO estimates. They will reach 1.9 percent from 2013 through 2019, the same level that was seen, on average, between 1980 and 2007.

In recent years, corporate profits reached new highs relative to GDP—domestic economic profits peaked at 10.6 percent of GDP in 2006—but the recession has reduced profits substantially. CBO projects that domestic economic profits will be 6.7 percent of GDP in 2009, rise to 7.0 percent of GDP in 2010, and climb to about 8.0 percent of GDP after 2012—above the 40-year historical average of 7.5 percent of GDP. Corporate income tax receipts largely follow swings in economic profits, but factors not measured by economic profits (such as capital gains, deductions for bad debt, and changes in tax law) also affect receipts. Those other factors all contribute to

10. Like the regular income tax, the AMT extracts a greater proportion of overall income as real income rises. But unlike the regular income tax, the AMT is not indexed for inflation. So as income rises each year with the overall price level, more taxpayers become subject to the alternative minimum tax.

11. That effect is smaller than in CBO's previous projections. Reductions in actual and projected inflation have lessened the impact of the AMT, especially in the early years of the projection period. The AMT contributes to a total increase of 0.6 percentage points in receipts as a share of the economy between 2009 and 2019. Two-thirds of that increase comes from the expiration of the temporarily higher exemption amounts, and one-third is caused by growth in nominal income.

12. Since CBO's economic projections were prepared, there have been substantial downward revisions to NIPA measures of wages and salaries for early 2009, which helps explain much of the decline in receipts. CBO's revenue projections had largely built in the effects of those revisions because they reflected the recent decline in receipts from income and payroll tax withholding during the first several months of 2009.

projected increases in corporate receipts relative to GDP after 2009, as the economy recovers and as legislated changes to rules affecting depreciation expire.[13]

CBO expects that revenues from corporate income taxes will remain below their historical share of the economy in the next few years. Tax law allows firms that experience losses during economic downturns to reduce their tax liability in future profitable years by deducting those losses from taxable income. Many firms are likely to use that feature of the corporate tax system to deduct 2008 and 2009 losses in 2010 and 2011 as they return to profitability. In addition, CBO assumes that the portion of the weakness in 2009 receipts that cannot be explained on the basis of current economic data will only gradually disappear over the next three years.

Social Insurance Taxes. Receipts from social insurance taxes (which are estimated to total $889 billion this year, or 6.3 percent of GDP) are projected to grow at roughly the same rate as the economy over the next decade, primarily because wages and salaries are expected to remain relatively stable as a share of GDP.

Rising unemployment has caused state unemployment insurance collections to drop and benefit payments to increase, depleting many state unemployment trust funds. CBO expects an eventual increase in unemployment insurance receipts to make up for the shortfall in the trust funds, but some states will probably delay raising their unemployment taxes to replenish the funds because of a slow economic recovery. Although unemployment taxes are only a small part of social insurance taxes, the delayed rebound in unemployment tax collections explains the temporary rise that CBO projects in social insurance taxes relative to GDP over the period from 2012 through 2016.

Earnings of the Federal Reserve. Receipts from the Federal Reserve are projected to remain relatively stable as a share of GDP over the next decade, staying between 0.2 percent and 0.3 percent of GDP. Such receipts are expected to total $27 billion in 2009 (0.2 percent of GDP).

Receipts from the Federal Reserve are linked to the institution's profitability, which depends on the earnings—from interest, capital gains, and capital losses—on the portfolio of assets it holds. Generally, the size of the Federal Reserve's portfolio, which has historically been almost exclusively invested in U.S. Treasury securities, is tied roughly to the amount of currency issued by the institution, which moves more or less in tandem with GDP. However, in response to the recession and the turmoil in the financial markets, the Federal Reserve has undertaken initiatives that have resulted in the size of its portfolio more than doubling, as financial institutions began to keep more funds on deposit at the Federal Reserve. The Federal Reserve now pays interest on those reserves but at rates near the federal funds rate (currently close to zero).

The Federal Reserve has also diversified its portfolio to address the illiquidity in the financial markets and to spur the recovery of the housing market. CBO expects that the increase in the size of the Federal Reserve's portfolio and the higher returns on some assets, especially certain mortgage-backed securities, will cause receipts from the Federal Reserve to temporarily rise as a share of GDP from 0.2 percent to 0.3 percent for the period from 2010 through 2012.[14] Thereafter, receipts are projected to return to 0.2 percent of GDP, when the portfolio reverts to a size closer to its historical position relative to GDP.

Other Taxes. CBO projects that revenues from sources other than income and payroll taxes and the Federal Reserve's earnings will rise from 0.9 percent of GDP through 2011 to about 1.1 percent of GDP through 2015 and remain at 1.0 percent of GDP thereafter.

The small increase in other taxes as a share of GDP through 2015 can be attributed to changes in the laws affecting estate and gift taxes. Under current law, receipts from those taxes are anticipated to fall from 0.2 percent of GDP in 2009 to 0.1 percent of GDP in 2010 and 2011 as the estate tax is reduced and ultimately repealed for 2010. However, the estate tax is scheduled to be reinstated in 2011, causing projected receipts to rebound to 0.2 percent of GDP in 2012 and to 0.3 percent of GDP after 2013.

13. The Economic Stimulus Act of 2008 and the American Recovery and Reinvestment Act of 2009 allowed firms to partially expense (immediately deduct from taxable income) 50 percent of their investment in equipment made in calendar years 2008 and 2009.

14. In keeping with the method the Federal Reserve uses to calculate its profits, CBO does not adjust the higher return on those assets (compared with the return on Treasury securities) to reflect the greater level of risk.

Outlays

Under CBO's baseline projections, outlays in 2010 will total $3.6 trillion, slightly lower than outlays this year. At that level, they will equal 25.2 percent of GDP. They are projected to inch down (both in nominal terms and relative to GDP) each year through 2012 as spending under ARRA tails off and as the anticipated economic recovery allows payments for unemployment compensation and other countercyclical benefit programs to return to more typical levels. Total projected spending heads up again beginning in 2013, with outlays for Medicare, Medicaid, and Social Security contributing significantly to that growth. Relative to GDP, mandatory spending will rise, and, under baseline assumptions, outlays for discretionary spending will fall. Over the 2010–2019 period, outlays under CBO's baseline will average 23.4 percent of GDP, higher than the 20.7 percent of GDP that federal spending has averaged over the past 40 years.

Estimated Outlays in 2010. The projected drop in outlays next year is mostly related to the subsidies for Fannie Mae and Freddie Mac. CBO's estimate of outlays for 2009 includes recognition of the subsidy cost of the liabilities and assets of Fannie Mae and Freddie Mac as they existed when the institutions went into conservatorship as well as the estimated cost of new activity for the current year—an estimated total of $291 billion. CBO projects that the ongoing subsidies related to those entities will be much smaller: $26 billion in 2010 and lesser amounts in subsequent years (see Table 1-4). If the full subsidy value of those activities, as estimated by CBO, was not reflected in the budget and CBO instead recorded cash infusions to those entities as outlays (an approach similar to the budgetary treatment used by the Administration, as discussed in Box 1-1 on page 8), nominal outlays would be roughly equal in 2009 and 2010.

In addition, outlays recorded for the TARP will drop in 2010, CBO estimates, by about $50 billion. The cost of the subsidies provided by the program—recorded in the budget on a present-value basis (including an adjustment to reflect the costs of market risk)—will total $133 billion in 2009 and $80 billion in 2010, in CBO's estimation. That drop reflects the assumption that the amount of activity under the program will decline over time. Total outlays for unemployment compensation also will fall slightly in 2010 under baseline assumptions because emergency unemployment benefits expire in December. (Outlays for regular unemployment benefits will rise in 2010, CBO estimates, as the unemployment rate peaks at more than 10 percent.)

Those spending reductions will be partially offset by continued growth in Social Security, Medicare, and Medicaid, as well as in other mandatory programs. Higher federal matching rates for payments to states for Medicaid continue through the end of December 2010 and thus contribute to the growth in spending for that program next year. In addition, outlays for the Supplemental Nutrition Assistance Program (formerly known as Food Stamps) will jump by 20 percent from 2009 levels, CBO estimates.

Discretionary spending is projected to rise by 11 percent in 2010. Boosted by appropriations provided in ARRA, nondefense discretionary spending is estimated to increase by almost 17 percent next year under baseline assumptions. CBO estimates that more of the discretionary funding from ARRA will be spent in 2010 ($100 billion) than in 2009 ($34 billion). Defense spending is projected to rise by nearly 6 percent in 2010, including a projected 9 percent increase in outlays for the procurement of weapon systems and military hardware.

Projected Outlays Through 2019. In total, outlays as a percentage of GDP are projected to drop through 2013—as subsidies for Fannie Mae and Freddie Mac decline, authority for the TARP expires, outlays for unemployment compensation return to prerecession levels, and temporarily enhanced matching rates for Medicaid expire—reaching an estimated 22.6 percent of GDP that year. In addition, CBO projects that outlays for the refundable portion of the earned income and child tax credits will fall significantly in 2012, the first full fiscal year after provisions of EGTRRA and JGTRRA are scheduled to expire. Net outlays for deposit insurance also are projected to decline as the Federal Deposit Insurance Corporation and the National Credit Union Administration collect additional insurance premiums to offset recent losses.

Table 1-4.

CBO's Baseline Projections of Mandatory Spending

(Outlays, in billions of dollars)

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
Social Security	612	678	698	722	751	786	825	870	920	974	1,033	1,096	3,781	8,674
Medicare[a]	456	498	514	559	570	627	692	723	787	820	854	942	2,964	7,090
Medicaid	201	253	284	269	272	284	303	325	347	371	398	427	1,411	3,280
Income Security														
Supplemental Security Income	41	45	47	53	45	52	53	54	60	56	52	59	249	530
Earned income and child tax credits	75	68	71	69	41	42	44	44	44	44	44	45	267	487
Unemployment compensation	43	116	109	79	62	47	44	44	48	49	51	53	341	586
Supplemental nutrition assistance	39	55	66	69	69	66	63	60	56	54	53	52	333	608
Family support[b]	25	27	27	25	24	24	24	24	25	25	25	25	125	249
Child nutrition	15	16	17	18	19	19	20	21	21	22	23	24	94	204
Foster care	7	7	7	7	7	8	8	8	8	9	9	9	37	80
Making Work Pay and other tax credits[c]	15	11	21	19	1	1	1	1	1	1	1	1	42	45
Subtotal	260	345	366	339	269	259	256	255	262	260	257	267	1,488	2,789
Civilian and Military Retirement														
Federal civilian[d]	75	79	84	85	87	90	92	95	99	102	106	109	439	950
Military	46	50	51	51	51	51	52	53	54	55	56	57	256	531
Other	9	8	8	8	8	9	10	10	11	12	12	12	41	99
Subtotal	129	137	142	144	146	150	154	159	164	169	174	179	736	1,580
Veterans[e]														
Income security	41	46	47	49	42	46	47	48	52	50	48	54	230	483
Other	3	4	8	10	11	11	11	12	13	13	13	14	51	116
Subtotal	45	50	55	59	53	57	58	59	65	63	61	68	282	599
Other Programs														
Net subsidy costs of Fannie Mae and Freddie Mac[f]	0	291	26	21	16	14	5	4	3	3	3	3	82	99
Troubled Asset Relief Program	0	133	80	15	10	3	*	*	*	*	*	*	108	109
Agriculture	11	17	19	18	12	16	16	15	15	15	16	16	81	159
TRICARE for Life	8	8	8	9	9	10	10	11	12	12	13	14	46	108
Higher education	5	-23	-2	7	7	6	5	9	10	10	11	11	23	74
Universal Service Fund	8	8	9	9	9	9	9	9	9	10	10	10	46	93
CHIP	7	8	11	13	13	14	9	6	6	6	6	6	59	90
Social services	5	5	6	5	5	5	5	5	5	5	5	5	27	53
Deposit insurance	19	15	14	5	-3	-11	-16	-18	-16	-13	-12	-6	-11	-76
Other	23	40	28	28	26	23	22	21	21	25	25	26	127	245
Subtotal	85	502	198	130	104	90	66	64	66	74	77	86	587	954

Continued

Table 1-4. Continued

CBO's Baseline Projections of Mandatory Spending

(Outlays, in billions of dollars)

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
Offsetting Receipts														
Medicare[g]	-70	-76	-79	-82	-88	-94	-103	-107	-113	-122	-130	-139	-445	-1,058
Employer's share of employees' retirement	-52	-56	-59	-61	-62	-64	-67	-69	-72	-75	-78	-81	-313	-688
Other	-71	-61	-49	-51	-54	-57	-57	-59	-61	-66	-67	-68	-269	-590
Subtotal	-193	-193	-187	-194	-204	-215	-226	-236	-246	-262	-275	-288	-1,027	-2,335
Total Mandatory Spending	**1,595**	**2,270**	**2,070**	**2,027**	**1,961**	**2,038**	**2,127**	**2,219**	**2,365**	**2,469**	**2,580**	**2,776**	**10,222**	**22,630**
Memorandum:														
Mandatory Spending Excluding Offsetting Receipts	1,788	2,463	2,257	2,222	2,165	2,253	2,353	2,454	2,611	2,731	2,855	3,065	11,249	24,966
Medicare Spending Net of Offsetting Receipts	386	422	436	477	483	533	589	616	674	699	724	802	2,518	6,033

Source: Congressional Budget Office.

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

* = between zero and $500 million; CHIP = Children's Health Insurance Program.

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. Includes outlays from the first-time home buyer credit, the American Opportunity credit, the research and experimentation and alternative minimum tax credits used in lieu of bonus depreciation, along with the Build America and Recovery Zone bonds and the income tax rebates for 2008.

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. CBO's estimates of the expected value of the temporary authority granted to the Secretary of the Treasury to purchase any obligations of and securities issued by the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac).

g. Includes Medicare premiums and amounts paid by states from savings on Medicaid's prescription drug costs.

Table 1-5.

CBO's Baseline Projections of Discretionary Spending

(Billions of dollars)

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
Budget Authority														
Defense	686	695	694	700	708	717	729	743	759	775	793	810	3,548	7,428
Nondefense	494	803	548	552	558	564	573	583	596	609	622	636	2,795	5,841
Total	**1,180**	**1,498**	**1,243**	**1,253**	**1,266**	**1,281**	**1,301**	**1,326**	**1,354**	**1,384**	**1,415**	**1,446**	**6,343**	**13,269**
Outlays														
Defense	612	657	695	704	700	711	720	733	752	763	775	797	3,530	7,350
Nondefense	522	584	683	666	643	637	638	642	650	661	674	687	3,267	6,580
Total	**1,135**	**1,241**	**1,378**	**1,370**	**1,343**	**1,347**	**1,358**	**1,374**	**1,401**	**1,424**	**1,448**	**1,484**	**6,797**	**13,929**

Source: Congressional Budget Office.

Notes: Nondefense discretionary outlays are usually higher than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund, which 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.

Discretionary spending 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 deflator (now replaced by the GDP price index) and the employment cost index for wages and salaries.

Budget authority for 2009 includes $283 billion originally provided in the American Recovery and Reinvestment Act of 2009. Because of the unusual size and nature of that funding, CBO, with the agreement of the House and Senate Budget Committees, has not extrapolated it in the baseline.

Spending on other mandatory programs will continue to increase over the next several years, CBO estimates. By 2013, the rate of growth in total mandatory spending will pick up, and growth will average about 5 percent annually in the latter part of the projection period. Under CBO's baseline projections for the coming decade, mandatory spending will average about 13 percent of GDP—higher than the 11.2 percent share that such spending represented last year.

Under baseline assumptions, discretionary outlays would rise from $1.2 trillion this year to $1.5 trillion in 2019 (see Table 1-5). After growing by more than 9 percent each year from 2008 through 2010, discretionary spending is projected to rise in the baseline by an average of less than 1 percent each year from 2011 through 2019. That slowing in the rate of growth is the result of the gradually diminishing spending of ARRA funds over the coming several years and the assumptions that govern construction of the baseline. Funding provided in ARRA is not extrapolated in CBO's baseline, so projected growth is a result of the extrapolation of the other appropriations provided in 2009. Because discretionary funding is assumed to increase at the rate of inflation (which is expected to be less than the rate of growth of the economy), such spending would fall as a percentage of GDP, declining from 8.8 percent this year to 7.0 percent at the end of the projection period. In contrast, over the past 40 years, discretionary spending has averaged about 8.9 percent of GDP. Historically, more than half of discretionary spending has been for defense activities (5.0 percent of GDP, on average); nondefense discretionary spending has averaged 3.9 percent of GDP over the past 40 years. In the baseline projections, by 2019, defense outlays amount to 3.8 percent of GDP and nondefense discretionary spending comes to 3.3 percent of GDP.

Net Interest and Federal Debt

Under the assumptions governing the baseline, net interest costs are projected to climb by more than 13 percent each year, on average, increasing from $196 billion in 2010 to $722 billion in 2019 (see Table 1-6). Rising interest rates and mounting debt held by the public contribute to that growth. Relative to GDP, net interest is projected to almost triple—climbing from 1.4 percent in 2010 to 3.4 percent by 2019.

CBO projects that, by the end of 2011, debt held by the public will have grown by nearly $4 trillion from its level at the end of 2008 and will have risen from 41 percent of GDP to 65 percent, which is nearly twice the percentage of GDP that public debt represented 10 years ago. Between 2012 and 2019, debt will edge up further relative to GDP, reaching 68 percent in 2019, CBO estimates.

A portion of the recent increase in debt held by the public is related to the purchase of assets through the TARP and other actions intended to stabilize the housing and financial markets (such as the cash infusions for Fannie Mae and Freddie Mac or the purchases by the Treasury of mortgage-backed securities). Also, the Treasury holds cash (which CBO expects to total $275 billion at the end of 2009) and other financial assets of value. CBO estimates that the value of such financial assets will total $1.2 trillion at the end of this year and average around $900 billion annually between 2010 and 2019.[15] Debt held by the public net of such assets is projected to total roughly $6.5 trillion (46 percent of GDP) at the end of 2009 and rise to $13.4 trillion (64 percent of GDP) by 2019.

The baseline reflects the assumption that the statutory limit on federal borrowing is raised as necessary to cover projected deficits as well as debt issued to other federal government accounts. CBO estimates that the federal debt will reach the current limit of $12.104 trillion during the last quarter of calendar year 2009.

Budget Projections Under Alternative Scenarios

To illustrate how different budgetary policies might affect the baseline, CBO estimated the budgetary impact of some alternative policy actions (see Table 1-7). The discussion below focuses on their direct effects on revenues and outlays; such changes also would affect debt-service costs (which are shown separately in Table 1-7).

Operations in Iraq and Afghanistan and Other War-Related Activities. CBO's projections of discretionary spending for future years include outlays for operations in Iraq and Afghanistan and for related activities. Those projections arise from funding provided in 2008 and prior years, from the $154 billion provided for 2009, and from the $1.6 trillion in budget authority for those or similar purposes that is projected over the 2010–2019 period (under the assumption that annual funding is set at $154 billion plus adjustments for anticipated inflation, in accordance with the rules governing baseline projections).

The annual funding appropriated for such activities might eventually be less than the amounts in the baseline if, as many observers expect, the number of deployed troops and the pace of operations diminish over time. Because of considerable uncertainty about those future operations, CBO has formulated two budget scenarios involving the deployment of U.S. forces to Iraq and Afghanistan or in future military actions elsewhere in the world. (Many other outcomes—some costing more and some less—are also possible.) Under both scenarios, the number of active-duty, reserve, and National Guard personnel deployed for those purposes would average about 210,000 in 2009. After 2009, force levels under the two scenarios would decline at different rates and to different sustained levels. The force levels projected under either scenario could represent various allocations of forces among Iraq, Afghanistan, and other regions. The amount of spending projected for the support of indigenous security forces in Iraq and Afghanistan and for diplomatic operations and foreign aid is the same in both scenarios.

Under the first scenario, troop levels would be significantly reduced over a three-year period; deployed forces would decline to an average of roughly 160,000 in 2010, 100,000 in 2011, 35,000 in 2012, and 30,000 from 2013 to 2019. That number of deployed troops would be sustained through 2019, although not necessarily in Iraq and Afghanistan. Under that scenario, discretionary outlays between 2010 and 2019 would be about $1.1 trillion less than the amount projected in CBO's baseline.

Under the second scenario, the number of troops would decline more gradually over a four-year period, remaining steady at 210,000 in 2010, then dropping to an average of about 190,000 in 2011, 150,000 in 2012, and 100,000 in 2013. By 2014 and in each year thereafter, 75,000 troops would remain overseas. Under that scenario, discretionary outlays through 2019 would be

15. In most cases, those financial assets are counted at face value. However, the common stock owned by the government is assessed at its current market value.

Table 1-6.

CBO's Baseline Projections of Federal Interest Outlays and Debt

(Billions of dollars)

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
							Net Interest Outlays							
Interest on Treasury Debt Securities (Gross interest)[a]	451	382	425	472	536	624	739	817	880	940	980	1,060	2,797	7,473
Interest Received by Trust Funds														
Social Security	-114	-120	-118	-119	-122	-128	-135	-143	-151	-159	-166	-174	-622	-1,414
Other trust funds[b]	-78	-63	-63	-63	-67	-73	-79	-84	-87	-90	-93	-98	-345	-797
Subtotal	-192	-183	-181	-182	-189	-201	-214	-226	-237	-248	-259	-272	-967	-2,211
Other Interest[c]	-13	-25	-47	-49	-50	-49	-48	-48	-50	-51	-45	-65	-243	-502
Other Investment Income[d]	6	3	*	*	-1	-1	-1	-1	-1	-1	-1	-1	-3	-6
Total Net Interest Outlays	**253**	**177**	**196**	**240**	**296**	**374**	**476**	**542**	**592**	**640**	**675**	**722**	**1,583**	**4,754**
							Federal Debt[e]							
Debt Held by the Public	5,803	7,612	8,868	9,782	10,382	10,870	11,439	11,986	12,581	13,174	13,611	14,324	n.a.	n.a.
Debt Held by Government Accounts														
Social Security	2,367	2,504	2,612	2,722	2,853	2,999	3,151	3,303	3,447	3,583	3,708	3,819	n.a.	n.a.
Other government accounts[b]	1,816	1,786	1,824	1,864	1,935	2,014	2,093	2,195	2,282	2,368	2,460	2,524	n.a.	n.a.
Subtotal	4,183	4,290	4,435	4,586	4,788	5,013	5,244	5,498	5,730	5,951	6,167	6,343	n.a.	n.a.
Total Gross Federal Debt	**9,986**	**11,901**	**13,303**	**14,367**	**15,170**	**15,883**	**16,683**	**17,484**	**18,310**	**19,125**	**19,778**	**20,667**	**n.a.**	**n.a.**

Continued

about $700 billion less than the amount in the current baseline.

Other Discretionary Spending. Many other assumptions are possible about the future growth of discretionary spending. For example, if appropriations (other than those for operations in Iraq and Afghanistan) were assumed to grow through 2019 at the same rate as nominal GDP instead of at the rate of inflation, total projected discretionary spending would be $1.7 trillion higher than the amount in the current baseline.[16] In contrast, if lawmakers did not increase appropriations after 2009 to account for inflation, cumulative discretionary outlays would be $1.0 trillion lower. Under that latter scenario (sometimes referred to as a "freeze" in appropriations), total discretionary spending would fall from 8.8 percent of GDP this year to 6.0 percent in 2019. Over the past 40 years, discretionary spending has averaged 8.9 percent of GDP, although that share was highest in the 1970s and 1980s. Over the past 20 years, discretionary spending has averaged 7.6 percent of GDP.

16. With the agreement of the House and Senate Budget Committees, CBO has not extrapolated the funding provided by ARRA in its baseline.

Table 1-6. **Continued**

CBO's Baseline Projections of Federal Interest Outlays and Debt

(Billions of dollars)

	Actual 2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
Memorandum:														
Total Federal Debt Subject to Limit[f]	9,960	11,876	13,277	14,341	15,144	15,856	16,656	17,456	18,282	19,097	19,750	20,639	n.a.	n.a.
Debt Held by the Public as a Percentage of GDP	40.8	53.8	61.4	65.2	65.9	65.5	66.0	66.5	67.1	67.5	67.0	67.8	n.a.	n.a.
Debt Held by the Public Net of Financial Assets[g]	5,293	6,453	7,898	8,852	9,484	9,996	10,521	11,041	11,622	12,240	12,711	13,422	n.a.	n.a.
Debt Held by the Public Net of Financial Assets as a Percentage of GDP[g]	37.2	45.6	54.7	59.0	60.2	60.2	60.7	61.3	62.0	62.7	62.6	63.6	n.a.	n.a.

Source: Congressional Budget Office.

Note: * = between -$500 million and zero; n.a. = not applicable; GDP = gross domestic product.

a. Excludes interest costs on debt issued by agencies other than the Treasury (primarily the Tennessee Valley Authority).

b. Mainly the Civil Service Retirement, Military Retirement, Medicare, and Unemployment Insurance Trust Funds.

c. Primarily interest on loans to the public.

d. Earnings on private investments by the National Railroad Retirement Investment Trust.

e. Debt held at the end of the year.

f. Differs from 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.

g. Subtracts the value of financial assets (such as preferred stock) purchased from institutions participating in the Troubled Asset Relief Program, preferred stock holdings in Fannie Mae (the Federal National Mortgage Association) and Freddie Mac (the Federal Home Loan Mortgage Corporation), purchases of mortgage-backed securities by the Treasury, cash holdings, and other financial instruments from debt held by the public.

Revenues. Under the assumptions used to construct CBO's baseline, major provisions of EGTRRA, JGTRRA, and ARRA will expire as scheduled at the end of 2010. The expiration of those provisions will increase net revenues by eliminating the 10 percent tax bracket, reducing the child tax credit, discontinuing the Making Work Pay credit, reinstating the estate tax with a lower effective exemption amount, and raising tax rates on ordinary income, capital gains, and dividends. In a scenario under which the provisions were extended, projected revenues would be lower than the amounts in the current baseline. For example, if all expiring tax provisions (except those related to the AMT exemption amount) were extended, total revenues over the 2010–2019 period would be $4.1 trillion lower, according to estimates by the Joint Committee on Taxation and CBO.[17] That estimate reflects the fact that an increase in the number of taxpayers subject to the AMT would partially offset the effect of lowering the amount of taxpayers' regular liabilities.

Another alternative policy that could affect revenues involves a modification of the AMT. The AMT's exemption amount and brackets are not indexed for inflation, which will cause the impact of the tax to grow sharply in coming years as more taxpayers become subject to the AMT. If the AMT was indexed for inflation after 2009, with no other changes to the tax code, federal revenues

17. The estimate includes increases in outlays for refundable tax credits but excludes any macroeconomic effects. CBO's baseline projection, in contrast, incorporates the effects of the tax provisions' expiration on the economy.

Table 1-7.

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

(Billions of dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
	Policy Alternatives That Affect Discretionary Spending												
Reduce the Number of Troops Deployed for Military Operations in Iraq and Afghanistan and Other War-Related Activities to 30,000 by 2013[a]													
Effect on the deficit[b]	0	11	42	83	112	126	133	137	139	143	147	374	1,074
Debt service	0	*	1	3	7	14	21	30	39	49	60	24	224
Reduce the Number of Troops Deployed for Military Operations in Iraq and Afghanistan and Other War-Related Activities to 75,000 by 2014[c]													
Effect on the deficit[b]	0	1	7	29	59	83	97	104	106	111	115	179	713
Debt service	0	*	*	1	3	6	11	17	24	31	39	9	131
Increase Regular Discretionary Appropriations at the Rate of Growth of Nominal GDP[d]													
Effect on the deficit[b]	0	-8	-33	-74	-120	-159	-194	-228	-261	-294	-328	-393	-1,698
Debt service	0	*	-1	-2	-6	-14	-24	-36	-52	-70	-91	-23	-296
Freeze Total Discretionary Appropriations at the Level Provided for 2009													
Effect on the deficit[b]	0	21	19	38	54	72	94	120	148	177	208	203	950
Debt service	0	*	1	2	4	7	12	19	27	37	50	13	158
	Policy Alternatives That Affect the Tax Code												
Extend EGTRRA and JGTRRA[e]													
Effect on the deficit[b]	0	-4	-121	-217	-247	-260	-271	-281	-290	-298	-307	-849	-2,296
Debt service	0	*	-1	-6	-17	-32	-48	-65	-85	-107	-130	-57	-491
Extend Other Expiring Tax Provisions[f]													
Effect on the deficit[b]	0	-48	-141	-199	-203	-201	-199	-198	-199	-202	-205	-791	-1,794
Debt service	0	*	-2	-8	-18	-30	-43	-56	-71	-87	-103	-58	-419
Index the AMT for Inflation[g]													
Effect on the deficit[b]	0	-7	-69	-31	-34	-37	-41	-46	-53	-60	-70	-177	-448
Debt service	0	*	-1	-2	-4	-7	-9	-12	-16	-20	-25	-15	-98

Continued

Table 1-7. **Continued**

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

(Billions of dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
Memorandum:													
Interactive Effect of Extending EGTRRA and JGTRRA and Indexing the AMT													
Effect on the deficit[b]	0	0	-13	-44	-49	-53	-58	-64	-70	-77	-85	-159	-514
Debt service	0	0	*	-1	-3	-6	-9	-13	-17	-22	-28	-10	-100
Total Discretionary Outlays in CBO's Baseline	1,241	1,378	1,370	1,343	1,347	1,358	1,374	1,401	1,424	1,448	1,484	6,797	13,929
Total Outlays for Operations in Iraq and Afghanistan in CBO's Baseline	160	165	160	157	159	161	161	164	166	168	172	803	1,634
Total Deficit in CBO's Baseline	-1,587	-1,381	-921	-590	-538	-558	-558	-620	-626	-622	-722	-3,988	-7,137

Source: Congressional Budget Office.

Notes: GDP = gross domestic product; EGTRRA = Economic Growth and Tax Relief Reconciliation Act of 2001; JGTRRA = Jobs and Growth Tax Relief Reconciliation Act of 2003; AMT = alternative minimum tax; * = between -$500 million and $500 million.

Positive amounts indicate a reduction in the deficit.

a. This alternative does not extrapolate the $154 billion in funding for military operations and associated costs in Iraq and Afghanistan provided for 2009. Future funding for operations in Iraq, Afghanistan, or elsewhere would total $124 billion in 2010, $82 billion in 2011, $39 billion in 2012, and then about $25 billion a year from 2013 on—for a total of $416 billion over the 2010–2019 period.

b. Excluding debt service.

c. This alternative does not extrapolate the $154 billion in funding for military operations and associated costs in Iraq and Afghanistan provided for 2009. Future funding for operations in Iraq, Afghanistan, or elsewhere would total $150 billion in 2010, $134 billion in 2011, $108 billion in 2012, $76 billion in 2013, and about $55 billion a year from 2014 on—for a total of $794 billion over the 2010–2019 period.

d. Under this alternative, appropriations for 2009 for operations in Iraq and Afghanistan are extrapolated according to rules for the baseline.

e. These estimates do not include the effects of extending the increased exemption amount or the treatment of personal credits for the AMT that are scheduled to expire at the end of 2009 under current law.

f. The estimates include the effects of extending several expiring provisions that were enacted or modified in the American Recovery and Reinvestment Act of 2009 (Public Law 111-5), such as the Making Work Pay tax credit, the American Opportunity tax credit, and the exclusion from taxable income of certain amounts of unemployment benefits. They also include the impact of extending other expiring provisions that have been in effect for a number of years.

g. This alternative incorporates the assumption that the exemption amount for the AMT (which was increased through 2009 in Public Law 111-5) is extended at its higher level and, together with the AMT tax brackets, is indexed for inflation after 2009. In addition, the treatment of personal credits against the AMT (which was also extended through the end of 2009) is assumed to be extended. The estimates shown are relative to figures under current law. If this alternative was enacted jointly with the extension of the expiring tax provisions, an interactive effect would occur after 2010 that would make the combined revenue loss over the 2011–2019 period greater than the sum of the two separate estimates by $514 billion (plus $100 billion in debt-service costs).

over the next 10 years would be $448 billion lower than the amount in the baseline, according to CBO and the Joint Committee on Taxation. The number of taxpayers who are subject to the AMT will depend on whether the tax provisions enacted since 2001 remain in effect. The combination of extending the expiring provisions and indexing the AMT for inflation would reduce revenues by more than the sum of those two policy alternatives considered alone. In particular, the interaction of the two policy alternatives would reduce revenues by an additional $514 billion from 2010 through 2019.

The Long-Term Budget Outlook

High deficits in the near term may be inevitable in the face of the severe economic downturn and the turmoil in the financial markets. Once the economy recovers, however, the nation will face significant fiscal challenges posed by rising health care costs and the aging of the population. Under CBO's baseline projections, even after the economy fully recovered from the current recession, federal deficits would remain at more than 3 percent of GDP, and the federal debt would be at historically high levels and gradually increasing. Changes being considered to the provision of health insurance and health care services in the United States could either add to or reduce that imbalance over the long term. Continued large deficits and the resulting increases in federal debt over time would reduce long-term economic growth by lowering national saving and investment relative to what would otherwise occur, causing productivity and wage growth to gradually slow.

Spending for Social Security, Medicare, and Medicaid will have to be controlled to achieve a sustainable fiscal situation in future decades. Last year, outlays for those three programs combined (not including offsetting receipts) accounted for about 9 percent of GDP. Spending for those programs is expected to rise rapidly over the next 10 years, outstripping the growth of GDP. By 2019, such spending is projected to total nearly 12 percent of GDP. Under long-term projections recently published by CBO, spending for those programs would continue to rise and could total almost 17 percent of GDP by 2035 if no changes are made to current law.[18]

If outlays grow at that rate, federal spending would increase to a level well above its historical percentage of GDP. Unless tax rates were also increased substantially, to levels never seen in the United States, annual deficits would climb and federal debt would grow significantly, posing a threat to the economy. Policymakers could mitigate the economic damage from rapidly rising debt by putting the nation on a sustainable fiscal course, which would require some combination of lower spending and higher revenues than the amounts now projected.

18. CBO's projections of federal spending and revenues through 2080 under various assumptions appear in Congressional Budget Office, *The Long-Term Budget Outlook* (June 2009).

CHAPTER

2

The Economic Outlook

The current recession has been the most severe in the United States since the 1930s. Since the recession began in December 2007, real (inflation-adjusted) gross domestic product has fallen by 3.7 percent, the number of jobs in the United States has declined by about 6.7 million, and the unemployment rate has jumped from 4.9 percent to 9.4 percent. But the rate of job loss has slowed in recent months, and a variety of other indicators suggest that the recession may have ended or could end within the next few months.

The Congressional Budget Office anticipates that four factors will contribute to a modest turnaround in economic activity in the second half of 2009:

- Fiscal stimulus provided under the American Recovery and Reinvestment Act of 2009;
- Improving conditions in financial markets—attributable at least in part to expansionary monetary policy and other actions by the Federal Reserve, the Treasury Department, and the Federal Deposit Insurance Corporation (FDIC);
- Slower declines in residential and business investment; and
- A slowing in the rate at which inventories are being drawn down.

Although economic conditions appear to be improving, CBO's forecast envisions a relatively slow and tentative recovery from the recession. In the current environment, a number of other factors—including global economic weakness, continued strains in financial markets, and households' desire to rebuild their savings—are expected to restrain growth for some time. Experience in the United States and in other countries suggests that recovery from recessions triggered by financial crises and large declines in asset prices tends to be protracted, and CBO's forecast reflects that experience. In addition, because CBO's forecast, unlike those of many other institutions, must reflect current law, it assumes that several tax reduction measures scheduled to expire do in fact expire, restraining growth in 2011.

In CBO's forecast, real (inflation-adjusted) gross domestic product falls by 1.0 percent between the fourth quarter of 2008 and the fourth quarter of 2009 before growing by 2.8 percent in 2010 and 3.8 percent in 2011 (see Table 2-1). In the second half of 2009 and the first half of 2010, economic output averages about 7 percent below its potential—the output the economy would produce if its resources were fully employed. That gap does not begin to narrow until the second half of 2010, as rising investment triggers a stronger recovery. Even so, by the end of 2011, output remains about 4 percent below its potential. In the forecast, the unemployment rate continues to rise, peaking just below 10½ percent in early 2010 and remaining well above 8 percent through the end of 2011 (see Figure 2-1). The output gap does not close fully until 2013; thereafter, real GDP grows at an average rate of 2.4 percent, and the unemployment rate averages 4.8 percent.

High unemployment and low demand are expected to hold down inflation in consumer prices over the next few years. CBO anticipates that inflation, as measured by changes in the consumer price index (CPI) in the fourth quarter of each year relative to the fourth quarter of the previous year, will average about 1.2 percent between 2009 and 2011; "core" CPI inflation, which excludes food and energy, was 2.0 percent in 2008 but is expected to slow to 1.6 percent in 2009, 1.1 percent in 2010, and 1.0 percent in 2011. In the latter years of the projection period, once the output gap has closed, both overall and core consumer price inflation average 2.0 percent.

Table 2-1.

CBO's Economic Projections for Calendar Years 2009 to 2019

	Forecast			Projected Annual Average	
	2009	2010	2011	2012–2013	2014–2019
			Year to Year (Percentage change)		
Nominal GDP (Billions of dollars)	14,163	14,570	15,146	16,799 [a]	21,320 [b]
Nominal GDP	-0.7	2.9	4.0	5.3	4.1
Real GDP	-2.5	1.7	3.5	4.7	2.5
GDP Price Index	1.8	1.1	0.4	0.6	1.5
PCE Price Index	0.4	1.5	0.8	0.7	1.6
Core PCE Price Index[c]	1.7	1.1	0.6	0.7	1.5
Consumer Price Index[d]	-0.5	1.7	1.3	1.1	1.9
Core Consumer Price Index[c]	1.7	1.3	1.0	1.1	1.9
			Calendar Year Average (Percent)		
Unemployment Rate	9.3	10.2	9.1	6.4	4.8
Three-Month Treasury Bill Rate	0.2	0.6	1.7	3.6	4.7
Ten-Year Treasury Note Rate	3.3	4.1	4.4	4.8	5.5
Tax Bases (Billions of dollars)					
Economic profits	1,336	1,443	1,584	1,852 [a]	2,387 [b]
Wages and salaries	6,465	6,614	6,792	7,672 [a]	9,773 [b]
Tax Bases (Percentage of GDP)					
Economic profits	9.4	9.9	10.5	10.9	11.1
Wages and salaries	45.6	45.4	44.8	45.5	45.9
			Fourth Quarter to Fourth Quarter (Percentage change)		
Nominal GDP	0.6	3.7	4.1	5.2	4.0
Real GDP	-1.0	2.8	3.8	4.5	2.4
GDP Price Index	1.6	0.9	0.3	0.7	1.6
PCE Price Index	1.2	1.1	0.8	0.8	1.6
Core PCE Price Index[c]	1.7	0.8	0.5	0.7	1.6
Consumer Price Index[d]	0.8	1.5	1.2	1.1	1.9
Core Consumer Price Index[c]	1.6	1.1	1.0	1.2	1.9

Sources: Congressional Budget Office.

Notes: GDP = gross domestic product; PCE = personal consumption expenditure.

The dollar values for nominal GDP and the tax bases are derived from data from the national income and product accounts that were available at the end of June 2009 and do not reflect the July revisions. Economic projections for each year from 2009 to 2019 are available at www.cbo.gov/spreadsheets.shtml.

a. Level in 2013.

b. Level in 2019.

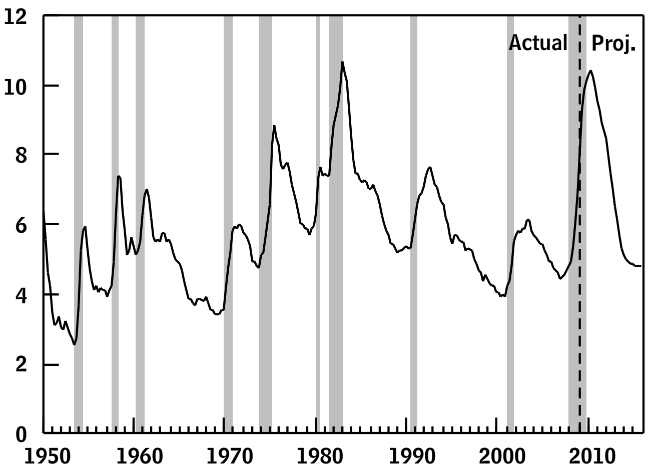
c. Excludes prices for food and energy.

d. The consumer price index for all urban consumers.

Figure 2-1.

The Unemployment Rate

(Percent)



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

Notes: Data are quarterly and are plotted through the fourth quarter of 2015.

The uncertainty surrounding the current forecast of economic activity is greater than usual, primarily for three reasons. First, although business cycles always have some unique features, the financial turmoil recently experienced in the United States is almost unprecedented. Second, policy interventions in response to the recession and the turmoil are also largely unprecedented. They include a substantial fiscal stimulus, unconventional monetary policy, and interventions by the Treasury and the FDIC to support the flow of credit through the banking system. Third, households have experienced substantial losses in wealth on their homes and equity holdings, and the magnitude of the adjustment they will make in their saving in response to those unusually large losses is uncertain.

Those factors contribute to particular uncertainty about the path of consumer prices, with some commentators pointing to the possibility of deflation—that is, a persistent fall in prices—and others to higher-than-desired inflation. The Federal Reserve's main concern in the near term has been to prevent the economy from becoming so weak that deflation ensues. The Federal Reserve's recent actions, however, have created the possibility of a sharp increase in borrowing by the private sector when economic recovery begins to add to the demand for credit; in principle, that additional borrowing could provide a large boost to economic activity and push up inflation. The Federal Reserve appears, however, to have enough tools at its disposal not only to prevent deflation but also to avoid excessive inflation.

The Outlook Through 2013

In describing the economic trends embodied in CBO's forecast, the next decade can be divided into two periods. For the first period—2009 to 2013—CBO's forecast reflects expectations about the cyclical movement of the economy, in particular its recovery from the current recession. In the second—2014 to 2019—CBO assumes that the economy will operate at close to its potential on average; although business cycles will continue, CBO is not able to forecast when or how they will occur during that period.

The forecast was prepared before the release of comprehensive revisions of the national income and product accounts in late July (see Box 2-1). Although the forecast tables therefore reflect data before those revisions, the discussion that describes what has happened to GDP and its components up to mid-2009, and Figures 2-1 through 2-12, reflect the revised data.

Output, Inflation, and Interest Rates

As of the second quarter of this year, real GDP had fallen 3.7 percent below the peak it reached at the end of 2007, and CBO estimates that the nation's output in 2009 will be about 7 percent below its potential. CBO's forecast envisions sluggish growth through the middle of 2010 that leaves the shortfall of economic output close to its current high level. That shortfall does not begin to close until the second half of 2010, when a more robust, investment-led recovery takes hold. The recovery continues in 2011, 2012, and 2013, despite a dampening of consumption during the first half of 2011 as tax increases scheduled under current law take effect.

From the fourth quarter of 2008 to the fourth quarter of 2009, real GDP is projected to decline by 1.0 percent, compared with a drop of 1.9 percent in 2008. However, CBO anticipates positive economic growth during the second half of 2009 (at an annual rate of 1.6 percent). Real GDP then grows by 2.8 percent over the four quarters of 2010, 3.8 percent in 2011, and an average of 4.5 percent in 2012 and 2013, at which point it will have recovered to its potential level.

Box 2-1.

Revision of the National Income and Product Accounts

In late July—too late to be reflected in the Congressional Budget Office's (CBO's) economic forecast—the Bureau of Economic Analysis (BEA) released a comprehensive revision of the national income and product accounts (NIPAs). The revision incorporates new data from a variety of sources and some changes in methods and definitions.[1]

The revisions indicate that real (inflation-adjusted) output and income grew slightly faster between 1997 and 2007—and that the economy weakened substantially more during the recession—than previously estimated. Average annual growth in real output between 1997 and 2007 is now estimated to be 3.0 percent, compared with the earlier estimate of 2.8 percent. In contrast, the fall in real gross domestic product (GDP) between the last quarter of 2007 (the peak of the business cycle) and the first quarter of 2009 is now reported to be 3.5 percent (compared with the previous estimate of 2.2 percent).

National income, which includes two income categories that are important for forecasting revenues, slowed much more in the fourth quarter of 2008 and the first quarter of 2009 than previously estimated. Corporate profits were revised downward by $116 billion (7.9 percent) in 2008 and at an annual rate of $130 billion (9.9 percent) in the first quarter of 2009. Wage and salary disbursements, which were revised upward by around $32 billion for the period from 2002 to 2007, were revised downward slightly in the second half of 2008 and then dramatically, by an annual rate of $156 billion (2.4 percent), in the first quarter of 2009.

That revision also incorporates a major reclassification of personal consumer expenditures (PCE), which boosted the annual growth of the core PCE price index by about 0.1 percent for the 2002–2007 period.[2] (The NIPA revision does not affect the definition of the core CPI-U—the consumer price index for all urban consumers.)

CBO completed its forecast before the revised data were released and therefore did not incorporate any of those changes, but an initial review of the revisions does not materially change the agency's outlook for either the economy or the budget baseline. The most important changes were the large downward revisions in wages and salaries for late 2008 and early 2009 and for profits in recent years. Those revisions might seem to imply a downward revision in the near-term projections for revenues. However, CBO's near-term forecast of revenues from personal and corporate income taxes is based on monthly data from reports by the Treasury Department on personal tax withholding and corporate income tax payments, which were much weaker than suggested by the previous NIPA data on wages and salaries and profits.

BEA has not yet released revised information on capital stocks, which CBO will use to recalculate its estimate of potential GDP. Such a revised estimate would probably be slightly higher than CBO's current estimate, reflecting the upward revision of GDP in the years before the recession.

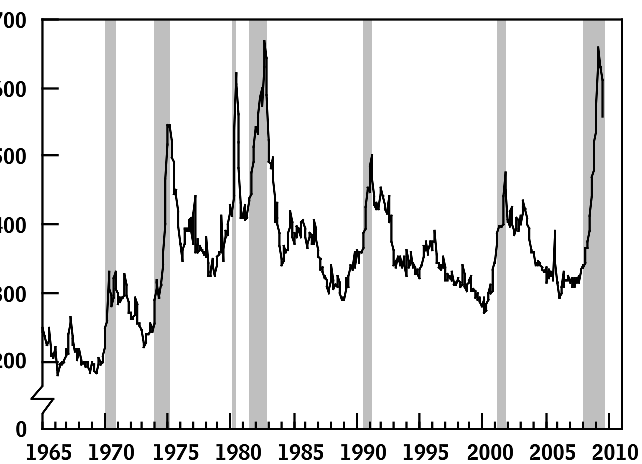
1. See Bureau of Economic Analysis, "National Income and Product Accounts Gross Domestic Product: Second Quarter 2009 (Advance Estimate) and Comprehensive Revision: 1929 Through First Quarter 2009," News Release BEA 09-33 (July 31, 2009), www.bea.gov/newsreleases/national/gdp/2009/pdf/gdp2q09_adv.pdf.

2. Core price indexes exclude food and energy.

Figure 2-2.

Initial Claims for Unemployment Insurance

(Thousands)



Sources: Congressional Budget Office; Department of Labor, Employment and Training Administration.

Note: Data are monthly averages of weekly data and are plotted through July 2009.

Inflation in CBO's forecast is very low during the next several years. On a fourth-quarter-to-fourth-quarter basis, the consumer price index increases by 0.8 percent in 2009, 1.5 percent in 2010, and an average of 1.1 percent between 2011 and 2013.

Interest rates in the forecast also remain at historically low levels for some time. The target federal funds rate—the rate that the Federal Reserve sets to implement its monetary policy—was reduced to near zero in late 2008. CBO's analysis incorporates expectations by the financial markets that the Federal Open Market Committee (FOMC), the body that sets monetary policy within the Federal Reserve System, will retain that stance at least through the end of 2009 and only slowly raise the rate afterward. Consequently, the yield on the 3-month Treasury bill averages 0.2 percent in 2009, 0.6 percent in 2010, and 1.7 percent in 2011 before rising to 4.1 percent by 2013. The yield on the 10-year Treasury note averages 3.3 percent in 2009, 4.1 percent in 2010, 4.4 percent in 2011, and 5.0 percent by 2013.

Employment

In the forecast, the unemployment rate rises to 10.1 percent in the fourth quarter of 2009 and peaks at 10.4 percent in the middle of 2010. It then falls to 9.9 percent by the end of 2010, 8.5 percent by the end of 2011, and 5.1 percent by the end of 2013, close to its "natural" rate of 4.8 percent—the rate that CBO estimates would occur in the absence of cyclical factors.

Employment has fallen sharply during this recession. Since December 2007, the peak of the last expansion, the unemployment rate has climbed from 4.9 percent to 9.4 percent (as of July), and the number of jobs (based on the establishment survey) has fallen by 6.7 million. In July, nearly 5 million people had been unemployed for more than half a year, representing a record 3.2 percent of the labor force. The cumulative decline in employment adds up to 4.8 percent of its prerecession level, marking the largest percentage loss of jobs in any recession since 1950. Initial claims for unemployment insurance, which averaged 322,000 per week in 2007, peaked at more than 650,000 in March 2009 and have since fallen back somewhat (see Figure 2-2).

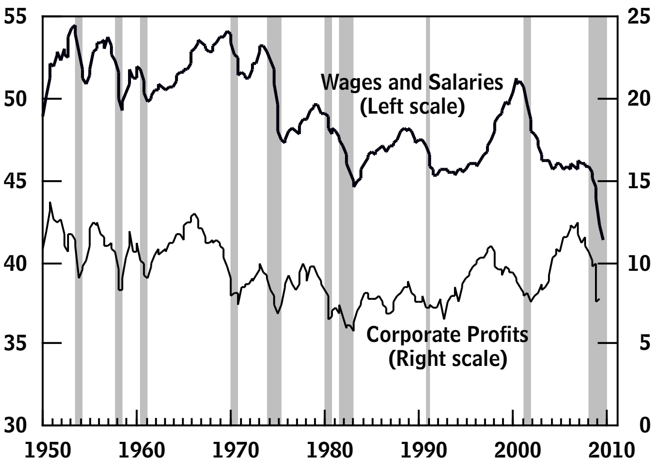
The rate of job losses in recent months has been surprisingly large compared with the decline in real GDP. Through early this year, employment declined and unemployment rose about as much as expected given the drop in output. (During that period, the decline in employment was larger than the rise in unemployment, as is typical during recessions, because some people dropped out of the labor force and were consequently not counted as unemployed.) In the second quarter, however, employment continued to fall rapidly (albeit not quite as fast as in the two preceding quarters), even though GDP is reported to have dropped at an annual rate of only 1.0 percent.

When CBO completed its March forecast, the most recently reported unemployment rate (for February) was 8.1 percent; in that forecast, CBO anticipated that the unemployment rate would rise to an average of 8.6 percent in the second quarter and 9.1 percent in the third. Instead, the unemployment rate jumped to 9.5 percent in June and remained close to that level in July, even though the second-quarter decline in real GDP was actually smaller than CBO had anticipated. Underlying that increase were job losses that averaged about 420,000 per month in the second quarter, sharply exceeding what CBO had expected. As a result of those job losses, combined with only a small drop in GDP, productivity in the nonfarm business sector rose by 6.4 percent (at an annual rate) in the second quarter.

Figure 2-3.

Wages and Salaries and Corporate Profits

(Percentage of potential gross domestic product)



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

Notes: The data incorporate the recent revisions of the national income and product accounts.

Data are quarterly and are plotted through the second quarter of 2009 for wages and salaries and through the first quarter for corporate profits.

If the labor market follows the pattern of recent recessions, employment will not increase and the unemployment rate will not decline until 6 to 12 months after output begins to rise again. Hiring usually lags behind the initial stages of a recovery because firms tend to increase output by first raising the number of hours existing employees work and their productivity and, only later, by adding employees. Moreover, the unemployment rate tends to lag behind the turning point in output because early in a recovery the number of people seeking work (that is, the labor force) tends to rebound faster than employment.

In the very near term, CBO's forecast reflects the pattern of recent recessions. CBO anticipates at least several more months of falling employment, albeit at a slower rate than in the first half of this year. July's reported decline of 247,000 jobs—the smallest monthly decline since August 2008—is consistent with that view. Even though the data on initial claims for unemployment benefits have shown some improvement over the past few months, those data indicate only that fewer people are losing jobs. Indicators of hiring, including the Job Openings and Labor Turnover Survey and an index of online job advertising compiled by monster.com, appear to be stabilizing at low levels, but no immediate improvement is evident. And with output projected to grow at less than a 2 percent rate over the next four quarters, even when growth in employment resumes it is not expected to be strong enough to reduce the unemployment rate until late 2010.

The unusually rapid rate at which employment has fallen suggests the possibility that employment could pick up more quickly than usual once the current recession has ended, as employers, especially in service-providing sectors, respond to growing demand. However, the recovery in employment also could be slower than anticipated, because many of the jobs lost in certain industries—including construction, financial services, and those related to the manufacture and distribution of automobiles—are unlikely to return even when the economy recovers. Many displaced workers in those industries will need to retrain and in some cases relocate in order to find new work—a process that takes time. Ongoing dislocations in the housing market also could delay the needed adjustments by making relocating more difficult.

Income

Like output and employment, income has fallen significantly since the recession began. Through the first quarter of 2009, national income had dropped by almost $400 billion (3.1 percent) since the recession started and appears to have declined further in the second quarter.[1] Moreover, that decline has been concentrated in the two components that are of greatest importance for projecting federal revenues—wages and salaries and corporate profits (see Figure 2-3).

Nominal income from wages and salaries was essentially unchanged between the end of 2007 and the end of 2008 but fell by about $285 billion (4.4 percent) in the first half of 2009. That decline primarily reflects falling employment and hours worked along with a sharp

1. Data on corporate profits—an important component of national income—for the second quarter were not yet available at the time of this writing.

slowdown in the rate of increase in hourly wages.[2] Average hourly earnings of production and nonsupervisory workers grew at a 1.4 percent annual rate in the first half of this year, down from close to a 4 percent pace in 2007.

In CBO's forecast, income from wages and salaries begins rising late this year, but at a subdued pace. Employment reaches bottom later this year, then increases slowly throughout the first half of 2010. Growth in hourly wages slows further, rising at only a 0.6 percent rate throughout the rest of 2009 and 2010. As a result, inflation-adjusted income from wages and salaries remains substantially below its prerecession level through mid-2010 before beginning to recover.

Corporate profits, which peaked at more than $1.6 trillion in 2006, have fallen from an annual rate of around $1.5 trillion in late 2007 to less than $1.2 trillion in early 2009. The decline was especially precipitous in late 2008 in the wake of last fall's acute financial turmoil and sharp decline in economic activity; profits rebounded slightly during the first quarter of this year, and CBO estimates that they continued to recover in the second quarter. In the forecast, however, they do not return to their prerecession level until 2011.

Factors Affecting the Pace of Economic Recovery

The government has taken a much larger role in the economy than usual, both with fiscal policy and through its support of financial institutions and markets. The actions taken so far will continue to support economic activity during the recovery from the recession.

But the dynamics of the private economy will also be important. Investment in housing has fallen far enough that the excess stock of housing could be absorbed even with only moderate growth in activity from current levels. Investment in business equipment and inventories is likely to respond to any upturn in sales; indeed, some investment to replace worn-out equipment may be warranted as soon as sales stop falling. However, losses in households' wealth are expected to restrain the growth of consumer spending, and many foreign economies are likely to remain weak.

Fiscal Stimulus

CBO expects that fiscal stimulus provided under the American Recovery and Reinvestment Act will significantly boost economic activity above what it would otherwise have been. The major provisions of that law provide for direct purchases of goods and services by the federal government, transfers to state and local governments (for infrastructure and other purposes), payments to individuals, and temporary tax reductions for individuals and businesses.

The effect of the stimulus legislation on the level of economic activity will probably build during the second half of 2009, have its maximum impact in the first half of 2010, and then gradually fade. CBO estimates that real GDP will be 1.4 percent to 3.8 percent higher in the fourth quarter of 2009 than it would have been without the stimulus, 1.1 percent to 3.4 percent higher in the fourth quarter of 2010, 0.4 percent to 1.2 percent higher in the fourth quarter of 2011, and zero to 0.3 percent higher by the fourth quarter of 2013. Those estimates are based on the projected magnitude and timing of federal outlays and revenue reductions included in ARRA, together with assumptions about the impact of those policies on GDP that encompass the views of a majority of economists.[3]

The unusual circumstances currently facing the economy heighten the uncertainty about the economic impact of fiscal stimulus. On the one hand, many consumers and state governments are facing serious financial constraints, so they might be more likely than usual to spend any additional resources they obtain; on the other hand, uncertainty about job security and the greater volatility of financial markets may have increased households' desire to save for precautionary reasons.

As expected, only a small part of the spending authorized by ARRA has occurred so far (see Box 1-1 on page 8). In contrast, the tax reduction for individuals (the Making Work Pay credit) took effect in April—three months

2. In addition, in its most recent estimate of the NIPAs, the Bureau of Economic Analysis (BEA) assumes a significant decline in the first quarter of 2009 for wage and salary income from bonuses and other nonregular payments. That estimate will be superseded by complete source data for the first quarter in BEA's next estimate, scheduled for release on August 27.

3. See Congressional Budget Office, "Estimated Macroeconomic Impacts of the American Recovery and Reinvestment Act of 2009," letter to the Honorable Charles E. Grassley (March 2, 2009).

sooner than anticipated at the time of enactment. That credit is scheduled to remain in effect through the end of 2010. The legislation significantly boosted disposable personal income in the second quarter and (with the exception of the one-time Social Security payments) will continue to support personal income through the end of 2010.

Discerning the actual effect of ARRA on the economy is difficult because there is no sure way to know how the economy would have behaved in the absence of that legislation. Nevertheless, CBO still expects that ARRA's ultimate impact on the economy will fall within the approximate ranges described above. Even though some elements of CBO's forecast, particularly the unemployment rate, have clearly worsened, such revisions to the forecast reflect a much sharper ongoing deterioration in underlying labor market conditions than had been anticipated, rather than a smaller impact of the legislation.

In addition to ARRA, the federal budget automatically tends to moderate recessions as a result of the structure of its tax and spending programs—a mechanism known as the "automatic stabilizers." Most important, when GDP and income fall, taxes also fall, and disposable income therefore declines less than GDP. At the same time, some spending—for example, for unemployment benefits—automatically increases. Reflecting those automatic stabilizers, CBO estimates that the cyclical component of the federal deficit (the part attributable to the fact that the economy is operating below its potential) will rise from about ½ percent of potential GDP in fiscal year 2008 to roughly 2 percent in 2009 and 2¾ percent in 2010, thus helping to cushion the economic downturn. As the economy moves toward its potential level after fiscal year 2010, the size of the cyclical deficit will fall.

The budgets of state and local governments, which provided a small additional automatic boost to the economy as their tax revenues fell, are turning toward restraint as state legislatures increasingly struggle to comply with requirements to balance their budgets, mainly through extraordinary cuts in spending. That process, though often painful for the states, is not likely to offset much of the federal fiscal stimulus because the economic effects of the spending cuts are themselves largely offset by the record declines in revenues.

Financial Conditions

The problems in the housing market and the subsequent turmoil in financial markets have played a major role in the current recession. Higher costs and reduced availability of credit in markets for short-term borrowing (for banks and for other firms), in bond markets (in which firms borrow for longer periods of time), and in securitization markets (in which groups of loans are pooled and sold as securities) contributed to an unusually large decline in borrowing. For example, net borrowing by nonfinancial businesses and households alone fell from over $2 trillion at an annual rate in the fourth quarter of 2007 to -$180 billion in the first quarter of 2009 as the recession deepened.[4] Vigorous actions by policymakers (described in Appendix B) have helped stabilize financial markets and restore more normal credit flows in some of them, which will support the recovery of the economy later this year. In addition, the capital stress tests administered by the Federal Reserve on 19 large financial institutions helped restore confidence, which is critical to the ability of those firms to raise private capital. Nevertheless, the experience of past financial crises suggests that the economy's recovery is likely to be muted because a full recovery of financial markets may be several years away.

Availability and Cost of Credit from Banks. Because of continued declines in asset quality and resultant subpar earnings, banks have tightened lending standards and terms in order to limit their losses and conserve their capital. That tightening continued this year, but at a slower pace, and may be approaching its end. As the recovery progresses and banks' financial conditions improve in the coming year or so, they should be in a better position to increase their lending.

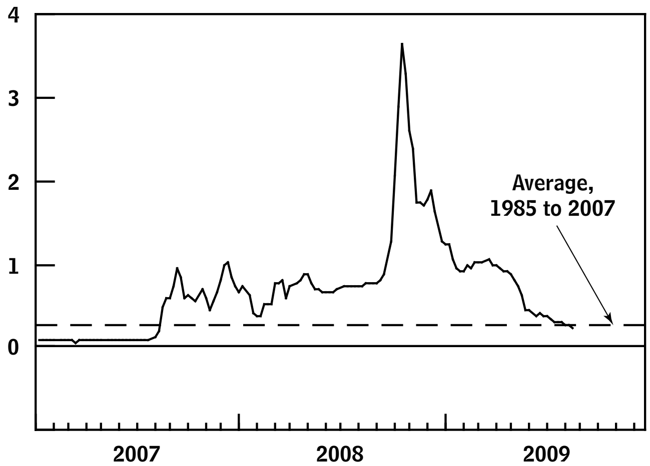
Banks' access to credit markets has improved greatly since last fall. One indication of that improvement is given by the difference between the interest rate banks pay to borrow from each other (measured by the three-month Libor, or London interbank offered rate) and the markets' collective expectation of the federal funds rate (measured from the three-month overnight index swap contract). That indicator of the risk that banks will default on their loans was down to about 0.25 percentage points in mid-August, compared with a spread of 1.2 percentage points at the beginning of the year and 3.6 percentage points

4. Net borrowing can be negative if new borrowing is less than the amount of repayments and writedowns on existing debt.

Figure 2-4.

The Risk Spread on Lending Between Banks

(Percentage points)



Sources: Congressional Budget Office; Bloomberg.

Notes: A spread is the difference between two interest rates. One, the three-month Libor (London interbank offered rate), is the interest rate major banks offer to other banks for loans of that duration. The other is the average federal funds rate expected over the following three months.

Data are weekly and are plotted through August 14, 2009.

during mid-October 2008 at the height of the financial turmoil (see Figure 2-4). Currently, the spread is roughly at its precrisis historical average of 0.27 percent during the 1985–2007 period and has narrowed much more rapidly than markets had expected just a few months ago.

Nevertheless, banks face a difficult recovery. Failures of banks have risen this year, and more failures are likely. Apart from continuing losses on home mortgages, consumer loans, and commercial and industrial loans, banks and other financial institutions are facing significant losses from commercial real estate loans and investments in securities backed by loans on commercial real estate (commercial mortgage-backed securities, or CMBSs).

The underlying problems in the commercial market are similar to those in the residential markets: excessive increases in valuations, high leverage, and lax underwriting standards. Although there are some signs that home prices are starting to bottom out, the prices for commercial real estate continue to fall sharply. Banks have a significant exposure to commercial real estate, with $1.8 trillion of loans and $900 billion of CMBS on their books at the end of the first quarter of 2009. In particular, a number of small and medium-sized banks have a concentrated exposure that is several times their capital.[5]

Facing such losses on collateralized lending and the weakening of business income, more banks have continued to tighten standards and terms on their loans to businesses than have eased their standards and terms, although the difference has continued to narrow this year. The Federal Reserve's survey of senior loan officers in July 2009 reported that about 30 percent of respondents on net had tightened lending standards on commercial and industrial loans to large and middle-market firms (firms with annual sales of $50 million or more) in the second quarter of this year. That rate is significantly below the peak of almost 85 percent in the third quarter of last year. About 60 percent of respondents on net—down from nearly 100 percent in the third quarter of 2008—reported they had increased interest rates on those loans relative to their cost of funds. (Banks made similar changes for loans to small businesses.) Those two observations—the slower rate of tightening of lending standards and the slower rate of increasing interest rate spreads—suggest that banks are starting to reach the limits of their need to tighten credit standards for businesses.

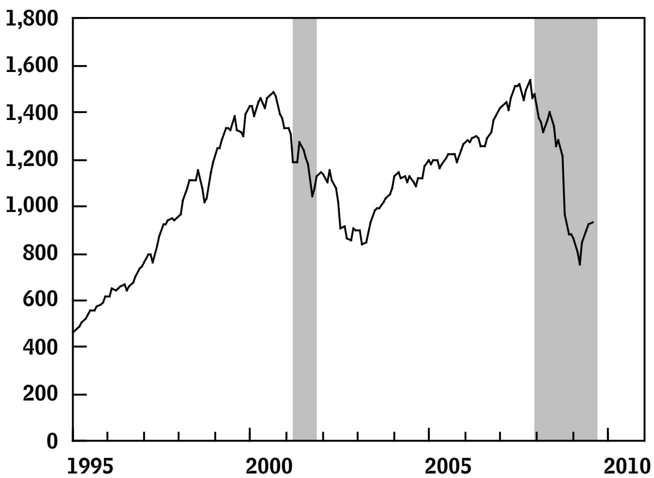
Banks also have continued to tighten lending standards on residential mortgages, although according to the July survey the number doing so was well below that in the second half of 2008. Moreover, the net percentages of banks reporting tighter lending standards (that is, the percentage reporting tighter lending standards minus the percentage reporting looser lending standards) on credit cards and other consumer loans have fallen by approximately half since their peaks in the second quarter of last year. Furthermore, the net percentage of banks reporting that they are less willing to make consumer installment loans has fallen sharply from 2008 levels, although there was no further improvement during the second quarter of this year. Should that improving trend continue, consumers are likely to see a greater availability of loans from banks in the coming year.

5. See statement of Jon D. Greenlee, Associate Director, Division of Banking Supervision and Regulation, Federal Reserve, before the Joint Economic Committee, *Commercial Real Estate* (July 9, 2009), www.federalreserve.gov/newsevents/testimony/greenlee20090709a.htm.

Figure 2-5.

Equity Prices

(Index, 1941-1943 = 10)



Sources: Congressional Budget Office; *Wall Street Journal*.

Notes: The equity index is the Standard & Poor's 500 Composite Index.

The data are monthly through July 2009.

Securitization Markets. The flow of credit through securitization markets remains low overall. A significant amount of the net borrowing by households and nonfinancial businesses before 2008 had been financed by securitization, including private and government-related issuances. Last year, private issuance of asset-backed securities (ABSs), residential mortgage-backed securities (RMBSs), and CMBSs collapsed to nearly nothing, falling from more than $1½ trillion in 2006 and somewhat less in 2007. Although issuance of RMBSs with government guarantees is strong so far this year, private issuance of securities backed by home mortgages and by home equity loans has remained virtually nonexistent. Moreover, issuance of securities backed by credit card loans, nonrevolving consumer loans, and auto loans had fallen to minimal amounts by the first few months of this year. Since then, the Term Asset-Backed Securities Loan Facility (TALF), initiated by the Federal Reserve and the Treasury, has supported the ABS market, and issuance of consumer ABSs have neared levels that existed before the financial crisis.

Commercial Paper. Businesses' access to the commercial paper market (where businesses get short-term loans) has improved markedly, although some significant problems remain. Conditions have improved in the market for higher-rated commercial paper (that is, short-term borrowing by firms with good credit ratings).[6] Top-rated industrial firms can now borrow at rates only a touch higher than those on Treasury bills. Spreads (over markets' collective expectation of the federal funds rate) for firms with riskier (second-tier) credit ratings (investment-grade ratings that are one step below the top rating) have also fallen substantially—from 2.6 percentage points for a 30-day loan at the beginning of the year to 0.35 points in mid-August—but the riskiest part of this market has not returned to pre-crisis conditions. The market for second-tier asset-backed commercial paper appears to have virtually ceased, and spreads remain elevated for industrial firms carrying the riskiest (third-tier) credit rating.

Bond and Equity Markets. Improvements in the corporate bond and equity markets are expected to encourage investment by businesses and spending by households. Lower interest rate spreads and higher equity prices reduce the cost of capital to businesses, which should encourage greater investment. Consumer spending also will be helped by the increase in wealth following the rally in equity prices since March.

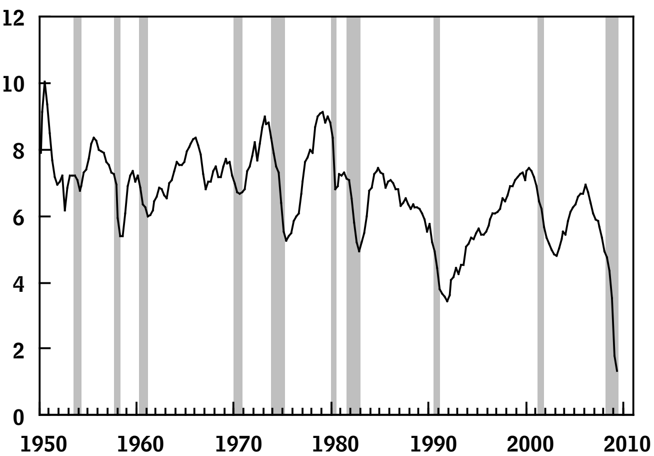
Yield spreads over Treasuries for longer-term corporate debt have narrowed considerably. For AA-rated firms, that spread has shrunk from 3.5 percentage points at the beginning of year to 1.3 percentage points in mid-August. Spreads for firms with lower credit ratings were extremely wide at the beginning of the year but have narrowed considerably. For firms carrying the below-investment grade rating of "B," the spreads remain high but have fallen by 5 percentage points since the beginning of the year. During the first half of 2009, issuance of corporate debt was at a record level, surpassing the previous record set in the first half of 2007, as firms apparently switched to longer-term financing and away from bank loans and commercial paper to take advantage of a lower cost of bond financing. Issuance of high-yield debt has been robust this year, albeit somewhat below levels earlier in the decade.

6. Earlier in the year, the Federal Reserve played a major role in the funding of commercial paper. However, as the financial turmoil has subsided and market interest rates on commercial paper have fallen well below the rate the Federal Reserve charges borrowers, firms with the highest ratings have generally been able to obtain funds without having to turn to the Federal Reserve.

Figure 2-6.

Net Private Investment

(Percentage of gross domestic product)



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

Notes: The data incorporate the recent revision of the national income and product accounts and include a consistent treatment of depreciation for the data before 1995 that was not included in the initial release of the revised data.

Data are quarterly and are plotted through the second quarter of 2009.

Earlier in the crisis, share prices were pressured by a decreased appetite for risk and by lowered expectations of future growth of profits because of the U.S. recession and a slowdown in economic activity in the rest of the world. From the end of 2007 to the low point reached on March 9, 2009, the Standard & Poor's 500 Composite Index fell by 54 percent (see Figure 2-5). Since then, however, share prices have risen by 48 percent through mid-August, about 10 percent above their level at the end of 2008. Stocks of firms in the financial sector—comprising brokerages, commercial banks, and insurance companies—led the upsurge, gaining more than 80 percent.

Mortgage Markets. Conditions in the mortgage markets most affected by federal actions have improved considerably. Federal actions have particularly supported the market for conforming mortgages—those that can be purchased by Fannie Mae and Freddie Mac. Direct purchases by the Federal Reserve of RMBSs issued by Fannie Mae and Freddie Mac also have helped to keep interest rates on mortgages low and to boost refinancing in the conforming-mortgage market. In addition, the Federal Housing Administration (FHA) and the Department of Veterans Affairs (VA) have substantially increased the volume of mortgages they guarantee. As a result of these and other factors, the overall volume of RMBSs issued by Fannie Mae and Freddie Mac and guaranteed by Ginnie Mae in the first seven months of 2009 has been roughly equal to full-year totals going back to 2005.[7] By contrast, originations of jumbo mortgage loans (which exceed the conforming size limit) have been weak.

Treasury Securities. Improved financial conditions, which have partially reversed the "flight to quality" during the height of the crisis, and expectations of economic recovery have played a role in raising interest rates on longer-term Treasury securities. Concerns over the worsening U.S. fiscal balance also may have contributed to that increase. The Treasury yield curve (as measured by the difference between the interest rates on the 10-year note and the 3-month bill) has steepened by about 1 percentage point since the beginning of the year (through the middle of August).

Investment

Over the past two years, plunging demand for goods and services sharply curtailed businesses' desire to expand capacity, and an excess stock of vacant housing units curtailed housing construction. Difficult financial conditions restrained investment by businesses and households even further. As a result, net private investment—new investment minus depreciation—fell in the second quarter of 2009 to its lowest percentage of GDP since World War II (see Figure 2-6). The reduction in investment, including changes in inventories, can account for the entire sharp decline in real GDP between the third quarter of 2008 and the first quarter of 2009.

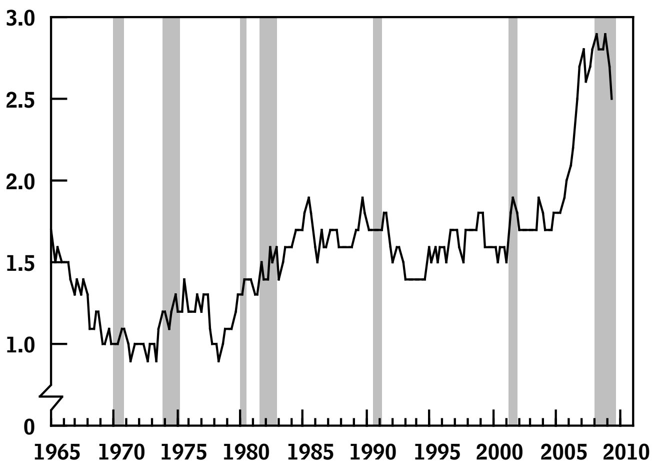
Just as declining private investment has played a major role in the current recession, rising investment will help boost the recovery. Changes in investment spending typically dominate the pattern of GDP growth during recessions and recoveries, and they appear to be even more dominant than usual during the current business cycle. Real investment will probably continue to decline in the second half of 2009 but at a slower rate; CBO expects that investment will then provide a large share of real growth from 2010 to 2013.

7. Ginnie Mae is a government agency that guarantees MBSs backed by federally insured mortgage loans, mainly loans insured by the FHA and the VA.

Figure 2-7.

Homeowner Vacancy Rate

(Percent)



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

Notes: The homeowner vacancy rate is the number of vacant year-round housing units that are for sale, as a percentage of all housing units intended for owner occupancy.

Data are quarterly and are plotted through the second quarter of 2009.

Housing. The main constraint on home building has been the glut of vacant housing caused by unusually favorable conditions in mortgage markets and overly optimistic expectations of future appreciation in house prices from 2002 through 2006. The vacancy rate for homes intended to be occupied by their owner, which averaged 1.6 percent during the 1990s, stood at 2.5 percent in the second quarter of 2009, implying roughly 700,000 more empty homes than if the vacancy rate were at its average for the 1990s (see Figure 2-7). The vacancy rate for rental units was also well above its 1990s average in mid-2009, and the number of vacant housing units that were held off the market for various reasons, including foreclosure, was unusually large; together those rates indicate that an additional 1.7 million units were vacant. As a result, the total number of vacancies is 2.4 million units above what would have been expected on the basis of previous trends. Builders have reacted to that glut of vacant units: Housing starts (new residential construction) are well below the roughly 1.5 million units per year that would ordinarily be required to accommodate growth of the adult population and to replace depreciating housing units.[8]

Residential investment has now fallen far enough that, in the absence of another significant shock to the financial system, a recovery in housing construction may be under way. There are already signs that the construction of single-family homes has stabilized. In July, starts and permits for single-family homes were both at their highest level in nine months. Similarly, in August, the housing market index published by the National Association of Home Builders and Wells Fargo reached its highest level since June 2008. That nascent turnaround in the construction of single-family homes has probably been aided by record-low mortgage rates during the first half of 2009. In contrast, the construction of multifamily homes, hit hard by constraints on commercial lending, has not yet begun to recover. If housing starts were sustained at their second-quarter annual rate of just 540,000 units, the entire oversupply of housing would be worked off in less than two years.[9] CBO's forecast assumes that the process of working off the oversupply will be a bit more gradual and that housing starts will move steadily back toward their long-run level over roughly the next three years.

Business Investment. In CBO's forecast, the turnaround in the growth of demand, together with an easing of financial conditions, boosts businesses' investment spending. Investment strengthens because business fixed investment depends primarily on the *growth* of demand and income, not their *level*. If demand for businesses' output is falling, they can forgo replacing worn-out equipment because they can satisfy the lower demand without it. But as demand stabilizes, even at a low level, businesses must begin to replace equipment as it wears out, pushing investment higher than it was when demand was falling. As demand begins to grow, even moderately, business investment picks up further.

Growth will not accelerate immediately because planning and executing new investment takes time. CBO expects that real investment in producers' durable equipment and software will begin rising by the end of 2009. However, real investment in nonresidential structures, which takes longer to plan and complete than do purchases of

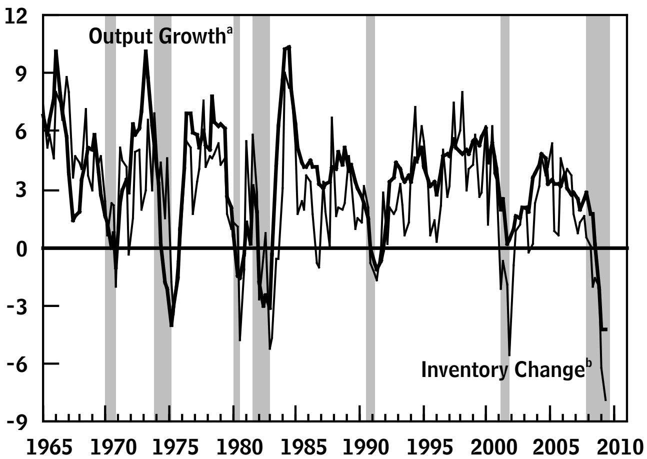
8. For further discussion, see Congressional Budget Office, *The Outlook for Housing Starts, 2009 to 2012*, Background Paper (November 2008).

9. The oversupply of housing will also be absorbed as people who are currently unemployed and have moved in with others reestablish independent households and as the sales of mobile homes decline.

Figure 2-8.

Change in Inventories and the Growth of Output

(Percent)



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

Notes: The data incorporate the recent revisions of the national income and product accounts.

Data are quarterly and are plotted through the second quarter of 2009.

a. The annualized growth of nonfarm business output over five quarters.

b. The change in inventories, at an annual rate, divided by the stock of inventories, lagged by one quarter.

equipment and software, will probably continue to decline into 2010, especially in light of the problems in the commercial real estate market. Weak architectural billings in recent months—a leading indicator of nonresidential construction—support that assessment, as do sizable increases in office and industrial vacancies in the second quarter.

The accumulation of business inventories, like business fixed investment, responds strongly to the growth of demand and will rise as the growth of demand strengthens (see Figure 2-8). When real demand shrinks, firms reduce their inventories to bring them in line with the lower level of sales. In the past, that process has taken slightly more than a year on average. Indeed, by the end of June, the ratio of inventories to sales for manufacturers, retailers, and merchant wholesalers had fallen about 40 percent of the way from its peak in December 2008 and January 2009 to its long-term trend. Consequently, inventories will probably continue to fall through early 2010, albeit by a gradually diminishing amount, as businesses continue to adjust to the sharp drop in sales in late 2008 and early 2009. With the inventory correction finally over and GDP growing again, businesses will probably begin to rebuild inventories in the second half of 2010.

Consumer Spending

Consumer spending fell by 1.8 percent over the past year but is likely to stabilize and begin growing modestly in the coming year. That forecast reflects CBO's expectations of moderate improvements in several of the major determinants of consumer spending: real income, household wealth, and the cost and availability of credit. In CBO's forecast, real consumer spending rises at an average annual rate of 1¾ percent during the second half of 2009, 2.1 percent in 2010, and 1.6 percent in 2011.[10]

CBO expects the personal saving rate to fall modestly from its recent level of 5.2 percent through next year and then to decline in 2011 as households seek to maintain their spending when scheduled tax increases reduce their disposable income. Thereafter, CBO projects that the saving rate will remain above the 3.0 percent rate that prevailed, on average, during the decade before the current recession, reflecting the loss of household wealth that has occurred.

Personal Income. Real personal income, the most important determinant of consumer spending, has weakened substantially in the past year and a half. Last year's rise in energy prices was responsible for some of the initial

10. That forecast does not include the economic impacts of the Car Allowance Rebate System (CARS, also known as the cash-for-clunkers program), which was launched late in July—too late for the actual results to be incorporated into CBO's economic forecast. CARS is a $3 billion government program that provides a cash subsidy for the purchase or lease of an eligible, fuel-efficient vehicle between July 1 and November 1 (or until funds are exhausted) if the consumer trades in a less fuel-efficient vehicle. The program has already significantly boosted vehicle sales. According to the Department of Transportation, as of August 13, dealers had submitted about 339,000 applications seeking CARS rebates totaling $1.4 billion. Because most of the vehicle sales thus far have come out of inventories rather than from new production, the direct impact of the program on real GDP has probably been minimal. However, largely in response to the CARS program, auto manufacturers have recently announced plans to increase production, which should boost real GDP in the third and fourth quarters.

Box 2-2.

Tax Changes Under Current Law and Their Effect on the Forecast

In preparing its economic forecast, the Congressional Budget Office (CBO) is required to assume that future fiscal policy will evolve on the basis of current law.[1] For that reason, CBO incorporates in this forecast the assumption that the tax reductions scheduled to expire by the end of 2010 will in fact expire.

Under current law, the tax cuts provided by the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), along with the Making Work Pay credit and certain other provisions, are scheduled to expire by the end of 2010. In addition, temporary relief for many households from the alternative minimum tax (AMT) is scheduled to expire at the end of 2009, with most of the resulting increase in tax payments occurring in 2011.

When the various provisions of EGTRRA and JGTRRA expire in 2011, income earned in the current 10 percent tax bracket will be taxed instead at a rate of 15 percent; the reduced tax rates in the top four tax brackets of 25, 28, 33, and 35 percent will revert to 28, 31, 36, and 39.6 percent, respectively. In addition, the highest tax rate on capital gains and dividends, currently 15 percent, will rise to 20 percent for capital gains; the highest rate for dividends, which will be taxed at regular tax rates, will be 39.6 percent.

The Congress has steadily increased through the years the exemption for the AMT, but those limits are scheduled to fall from $70,950 (for couples) and $46,700 (for individuals) in the 2009 tax year to $45,000 and $33,750, respectively, in 2010. Other expiring provisions include the temporary expansion in the child tax credit, the HOPE credit for certain expenses for higher education, and the credit for first-time home buyers.

1. See Congressional Budget Office, *What Is a Current-Law Economic Baseline?* Issue Brief (June 2, 2005).

Taken together, the expiring provisions account for an increase in revenue for the government and a corresponding decrease in disposable personal income of around $300 billion (2.7 percent) in 2011. The expiring provisions in EGTRRA and JGTRRA account for roughly half of that amount, the AMT phase-in for about $60 billion, and the Making Work Pay credit for roughly $50 billion. Other expirations account for the remainder.

Estimates of the effect of those expirations on the economic outlook depend on assumptions about the impact of a change in personal income on economic activity. CBO calculated a possible range for those effects using estimates of the cumulative effect on output of a $1.00 reduction in taxes. For example, a $1.00 reduction in the Making Work Pay credit was estimated to reduce gross domestic product (GDP) by $0.50 to $1.70.[2] Using the middle of the range of those estimates, which were calculated separately for different tax provisions, CBO estimated that GDP in 2011 will be about $200 billion (1.3 percent) lower than it would be if the tax cut provisions were extended. However, GDP growth in subsequent years would be slightly greater as output returned to its potential—the level at which its resources are fully employed.

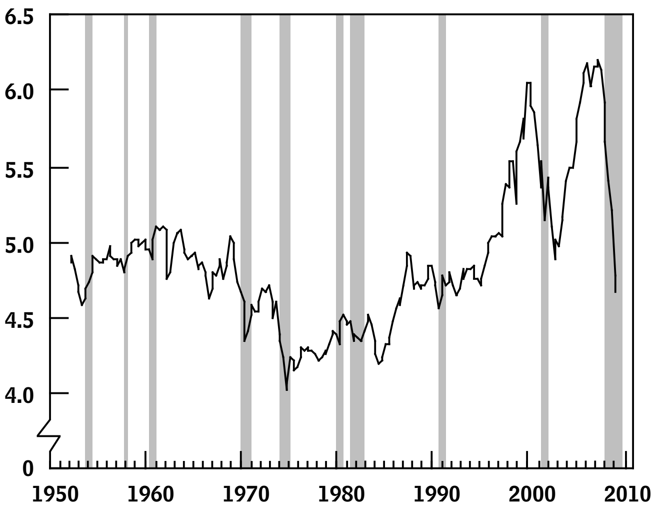
After 2013, CBO's projections assume that GDP averages close to its potential level, which is also affected by the expiration of the tax cuts. Eventually, the capital stock will probably be somewhat bigger, because with higher revenue there is lower federal debt and less crowding out of private capital stock. At the same time, however, the higher tax rates will reduce the supply of labor. CBO has not separately calculated the net effect on GDP of those two factors in this forecast.

2. See Congressional Budget Office, "Estimated Macroeconomic Impacts of the American Recovery and Reinvestment Act of 2009," letter to the Honorable Charles E. Grassley (March 2, 2009).

Figure 2-9.

Household Net Worth

(Ratio to disposable personal income)



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

Notes: The data incorporate the recent revisions of the national income and product accounts.

Data are quarterly and are plotted through the first quarter of 2009.

decline; more recently, however, falling wages and salaries have been the culprit. Lower tax payments and higher transfer payments to individuals offset much of those declines, leaving real disposable personal income by mid-2009 slightly above its prerecession level. That boost reflects the automatic tendency for tax payments to fall and for some transfer payments (such as unemployment insurance) to increase when economic activity contracts; it also reflects the impact of the various provisions in ARRA pertaining to tax reductions and transfer payments.

Disposable income is likely to remain weak during the next two years. Even though the rate of deterioration in employment has slowed, CBO expects some further job losses in the next several months and anemic growth in wages through 2010. In addition, the expiration of various tax cuts in 2010 and 2011 will reduce after-tax income (see Box 2-2).

Household Wealth. The ratio of net wealth to disposable personal income fell from its peak of 6.2 in the second quarter of 2007 to 4.7 in the first quarter of 2009, largely because of the decline in prices for houses and corporate equities, bringing the ratio back to levels last seen in the mid-1990s (see Figure 2-9). That lower amount of wealth reduced consumers' ability to borrow against their home equity and increased their need to set more money aside to attain their desired level of savings. Indeed, the personal saving rate rose from a recent low of 1.2 percent in the first quarter of 2008 to 5.2 percent in the second quarter of this year, close to levels last seen in the late 1990s.

CBO expects total household net worth to recover slowly. Housing wealth will probably continue falling until the second half of 2010, when national housing prices are likely to start rising modestly again. At the same time, equity wealth, which has risen since March, is expected to keep improving as further signs of economic recovery appear.

Cost of Borrowing and Availability of Credit. Banks have vigorously tightened standards and terms for consumer loans over the past year. However, the rate of tightening has eased in recent months and is likely to continue doing so in the coming year as banks recover from their losses and strengthen their capital positions.

Foreign Trade

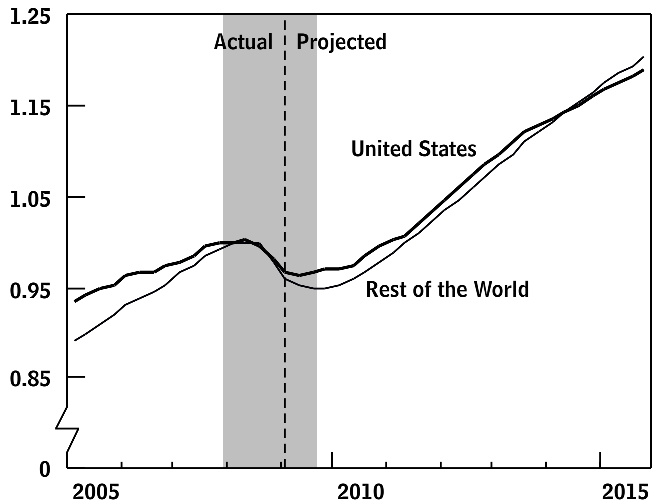
Slow foreign growth and the lagged effects of the rise in the value of the dollar late last year and early in 2009 will probably keep foreign demand for U.S. goods and services weak for another year, whereas U.S. demand for foreign goods and services is expected to pick up by the end of this year. Consequently, net exports are likely to fall in the coming year but then begin to rise when the foreign economies recover.

Many foreign economies have experienced a deeper downturn than has the United States, although there have been signs since early this year that the rate of economic contraction is slowing abroad as well as in the United States. Between the first quarter of 2008 and the first quarter of 2009, real GDP overseas fell by 4.4 percent (for the export trade-weighted average of the 24 largest trading partners of the United States), compared with

Figure 2-10.

Real GDP in the United States and the Rest of the World

(Index, first half of 2008 = 1)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Organisation for Economic Co-operation and Development; Haver Analytics.

Notes: Gross domestic product (GDP) in the rest of the world is the export trade-weighted average of real (inflation-adjusted) GDP in the 24 most important trading partners of the United States. The data incorporate the recent revisions of the national income and product accounts. The projected levels of real GDP for the United States are extrapolated from the second quarter of 2009 (the last published data) using CBO's projection of real GDP growth.

Data are quarterly and are plotted through the fourth quarter of 2015.

3.3 percent in the United States (see Figure 2-10).[11] Although China and India have avoided recession, virtually every other major economy has contracted significantly. In general, economies that relied heavily on export-led growth were hit especially hard by the global recession.

The rise in the exchange rate for the trade-weighted dollar between mid-2008 and early 2009 will also dampen U.S. exports. Since 2002, the dollar's value has been trending downward, but between April 2008 and March 2009, the trade-weighted dollar soared by 18 percent, rising sharply against all major currencies except the Japanese yen and the Chinese yuan. During that period, the global crisis boosted the dollar's value because of its unique status as the major international reserve currency and because of the role of U.S. Treasury securities as relatively safe investments in a time of global economic upheaval. Since March, the dollar has declined, as the global economic contraction slowed and investors' confidence improved (see Figure 2-11). CBO's forecast assumes that the dollar will decline throughout the 10-year projection period by an average of more than 2 percent per year.

The Outlook for Inflation

In CBO's forecast, excess productive capacity and slack in the labor market dampen the growth in wages and prices over the next several years. The growth of the core price index for personal consumption expenditures (PCE), which excludes food and energy, slows from about a 1.6 percent annual rate during the first half of 2009 to an average of about 0.6 percent from 2011 through 2013. The growth of the overall PCE price index differs from that of the core index because of fluctuations in the prices of energy and food. Gasoline prices surged during most of 2008, dropped precipitously between August 2008 and March 2009, and then bounced up again through July. Prices of household energy, predominately electricity and natural gas, peaked at about the same time as gasoline prices and have fallen steadily since then. And prices for food at home, after receiving a boost from rising prices for agricultural commodities throughout most of last year, have dropped about by 2 percent since November 2008. In general, reductions in energy and food prices have caused the overall price measure to grow less than the core measure since last fall. However, the two measures are forecast to rise at similar rates after 2010.

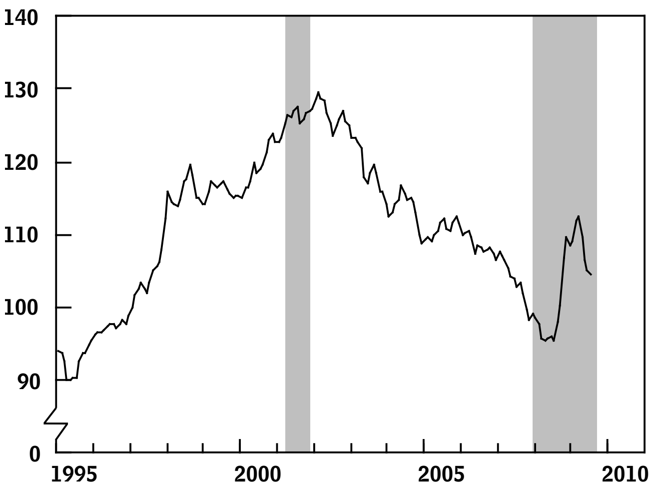
Other commonly cited measures of consumer price inflation—the consumer price index for all urban consumers (CPI-U) and the CPI-U excluding food and energy—tend to grow slightly faster than the corresponding price indexes for personal consumption expenditures. The PCE price index and the CPI-U include different items and have slightly different weighting and source data.

11. In the 12 months ending with the first quarter of 2009, real GDP contracted by 4.9 percent in the United Kingdom and in the Eurozone and by 8.4 percent in Japan. A few emerging economies—notably China and India—avoided outright economic contraction but still experienced a substantial slowdown. Most emerging economies fared much worse: During the year that ended in the first quarter of 2009, real GDP plunged by 10.9 percent in Taiwan, 9.5 percent in Singapore and in Russia, 8.6 percent in Mexico, and 4.3 percent in South Korea.

Figure 2-11.

Exchange Value of the Dollar

(Index, January 1997 = 100)



Sources: Congressional Budget Office; Federal Reserve Board.

Notes: The broad index is a 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. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

Data are monthly and are plotted through July 2009.

The overall CPI-U, for example, has grown about a quarter of a percentage point faster than the PCE price index for the past 20 years.[12] CBO's forecast maintains that difference between the growth rates of the CPI-U and the PCE price index on average over the 10-year projection period.

Downward Pressures on Inflation

Excess capacity in the economy, which is likely to persist at least through 2012, will dampen price increases. In recessions, price inflation is contained largely because the need to preserve sales deters firms from raising prices. Similarly, workers accept lower wages than they would if the unemployment rate were lower, and landlords accept lower rents than they otherwise would in order to keep their units occupied. Thus, the rate of inflation tends to slow when the unemployment gap—the difference between the actual unemployment rate and the rate that would prevail if the economy were operating at its potential—is positive (see Figure 2-12).

12. The quarter point is based on the difference between the research series of the CPI-U (CPI-U-RS) and the PCE price index.

One important category of core price measures—residential rents (including actual rents and imputed rents on owner-occupied housing)—will help ease inflation in the near term. High vacancy rates for apartments and single-family houses available for rent are expected to dampen the growth of rents further over the next two years. Because rents account for about 19 percent of the core PCE price index and 38 percent of the core CPI-U, further declines in rent inflation are a significant part of the projected easing in the growth of core consumer prices.

Risks of Higher Inflation or Deflation

Some analysts are concerned that the massive increase in liquidity provided by the Federal Reserve over the past year, combined with a sharply declining dollar and a jump in commodity prices, could trigger a resurgence of inflation. Others are concerned that the prolonged period of excess capacity will cause deflation, which could exacerbate the recession by discouraging spending for investment and consumption, thus perpetuating the decline in prices.

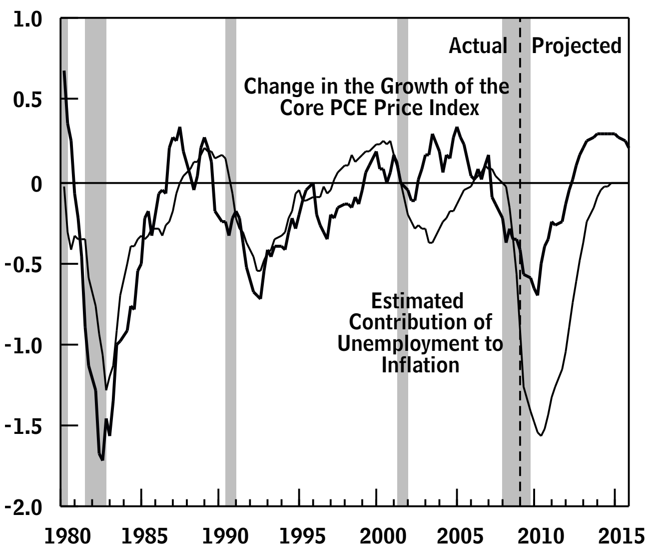
CBO's forecast assumes that the Federal Reserve will be able to navigate between the extremes of higher inflation and deflation, but the unprecedented nature of recent economic developments and the Federal Reserve's response to those developments suggests that the possibility of error is greater than usual. The decision about when to begin actively reducing its asset holdings, and hence the amount of liquidity in the economy, is qualitatively no different from the decision about when to change course in the conduct of traditional monetary policy (for example, when to start raising the target federal funds rate). However, the Federal Reserve will have little experience to guide its decision about the rate at which it disposes of the excess assets and may do so too slowly or too rapidly—risking either higher inflation or deflation. The Federal Reserve's uncertainty about the health of financial institutions may encourage it to raise interest rates and remove extra liquidity too slowly; conversely, its uncertainty about expectations for higher inflation may lead it to take those steps too fast.

A declining dollar and rising commodity prices pose potential upside risks to the outlook for inflation. CBO's forecast assumes that the value of the dollar will fall throughout the 10-year projection period; however, only a small part of that decline is passed through to import prices, so the impact on inflation is mild. Because the United States is such a large market, foreign exporters to

Figure 2-12.

Unemployment and the Change in Inflation

(Percent)



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

Notes: The change in inflation is measured as the change in the growth of the centered 12-quarter moving average of the core personal consumption expenditure price index (the core measure excludes food and energy). The estimated contribution of unemployment to inflation is based on regression estimates of the relationship between those variables. See Congressional Budget Office, *Reestimating the Phillips Curve and the NAIRU*, Working Paper 2008-06 (August 2008).

The data incorporate the recent revisions of the national income and product accounts.

Data are quarterly and are plotted through the fourth quarter of 2015.

the United States try to keep prices low to avoid losing market share. They can do that through some combination of reducing costs, boosting productivity, or, if necessary, accepting a lower profit margin. In addition, in many categories of imports, a rapid increase in import prices relative to domestic prices would induce some shifting of purchases to lower-priced domestic producers.

The sharp jumps in the prices of a wide range of commodities, especially oil, from early 2007 to mid-2008—when the worldwide demand for commodities drove prices up much more than expected—suggest the potential for large increases as the global economy recovers. CBO's forecast assumes only moderate increases in commodity prices during the projection period, but a larger jump could generate a significant short-term uptick in inflation in the United States. That uptick would be sustained only to the extent allowed by the Federal Reserve's monetary policy, as occurred during the 1970s. Moreover, wages and prices were much more flexible and responsive to excess supply over the past 25 years than they were during the earlier period. For those reasons, commodity price shocks in the 1990s and early 2000s did not set off a self-perpetuating high rate of inflation. And although the price of crude oil rose more than fourfold, from about $30 a barrel in 2003 to over $130 a barrel in mid-2008, the effect on core inflation was limited and temporary. Thus, even if they occur, commodity price shocks are unlikely to result in sustained high inflation during the coming decade.

The high unemployment rate suggests a significant risk of deflation, but CBO's forecast does not envision such an outcome, for three reasons:

- The mild upward pressure from import prices will offset some of the impact of the unemployment gap and excess capacity.
- Financial markets and households still anticipate positive inflation and appear to largely discount the risk of deflation. Those expectations are to some degree self-fulfilling because they affect the behavior of those who determine wages and prices.
- Wages, on average, are already growing very slowly, and a further decline would, for some groups, probably require reductions in nominal wages, which both workers and managers tend to avoid.

The Economic Outlook from 2014 Through 2019

From 2014 through 2019, real GDP growth is expected to average 2.4 percent annually, roughly equal to the rate of growth projected for potential output during those years (see Table 2-2). In CBO's forecast, the gap between GDP and potential GDP, which averages nearly 7 percent in 2009 and 2010, is closed completely by robust growth between mid-2010 and 2013 and remains at zero for the final six years of the projection period. The unemploy-

Table 2-2.

Key Assumptions in CBO's Projection of Potential Output

(By calendar year, in percent)

	Average Annual Growth						Projections		
	1950-1973	1974-1981	1982-1990	1991-2001	2002-2008	1950-2008	2009-2013	2014-2019	2009-2019
					Overall Economy				
Potential Output	3.9	3.2	3.2	2.9	2.8	3.4	2.0	2.4	2.2
Potential Labor Force	1.6	2.5	1.6	1.1	1.1	1.6	0.8	0.5	0.6
Potential Labor Force Productivity[a]	2.3	0.7	1.5	1.7	1.7	1.8	1.2	1.9	1.6
					Nonfarm Business Sector				
Potential Output	4.0	3.5	3.4	3.3	3.1	3.6	2.3	2.9	2.6
Potential hours worked	1.3	2.2	1.7	1.1	0.9	1.4	0.7	0.5	0.6
Capital services	3.8	4.3	4.2	4.7	2.6	3.9	1.6	3.9	2.9
Potential TFP	1.9	0.7	0.9	1.1	1.7	1.4	1.4	1.4	1.4
Potential TFP excluding adjustments	1.9	0.7	0.9	1.0	1.2	1.3	1.2	1.2	1.2
TFP adjustments	0	0	0	0.1	0.4	0.1	0.1	0.1	0.1
Price measurement[b]	0	0	0	0.1	0.1	0	0.1	0.1	0.1
Temporary adjustment[c]	0	0	0	0	0.3	0	0	0	0
Contributions to Growth of Potential GDP in the Nonfarm Business Sector[d] (Percentage points)									
Potential hours worked	0.9	1.6	1.2	0.8	0.6	1.0	0.5	0.3	0.4
Capital services	1.1	1.3	1.3	1.4	0.8	1.2	0.5	1.2	0.9
Potential TFP	1.9	0.7	0.9	1.1	1.7	1.4	1.4	1.4	1.4
Total Contributions	**4.0**	**3.5**	**3.4**	**3.3**	**3.1**	**3.6**	**2.3**	**2.9**	**2.6**
Memorandum:									
Potential Labor Productivity[e]	2.6	1.3	1.7	2.2	2.2	2.2	1.7	2.4	2.1

Source: Congressional Budget Office.

Note: Total factor productivity (TFP) is average real output per unit of combined labor and capital services. The growth of TFP is defined as the growth of real output that is not explained by the growth of labor and capital.

a. The ratio of potential output to the potential labor force.

b. An adjustment for a conceptual change in the official measure of the gross domestic product chained price index.

c. An adjustment for the unusually rapid growth of TFP between 2001 and 2003.

d. The contribution of each factor input equals its growth rate times its coefficient in the production function used to calculate potential output. Those coefficients are 0.7 for potential hours worked, 0.3 for the capital services index, and 1.0 for potential TFP. For more details, see Congressional Budget Office, *CBO's Method for Estimating Potential Output: An Update* (August 2001).

e. The estimated trend in the ratio of output to hours worked in the nonfarm business sector.

ment rate averages 4.8 percent, equal to CBO's estimate of the natural rate of unemployment during that period.

Projections for inflation and interest rates are slightly higher than those CBO issued in March. CPI inflation averages 1.9 percent annually during the 2014–2019 period, and the GDP price index grows at an average annual rate of 1.6 percent. Both are about 0.1 percentage point higher than in the March forecast. The rates on 3-month Treasury bills and 10-year Treasury notes average 4.7 percent and 5.5 percent, respectively, following the recovery.

To develop its projections for 2014 through 2019, CBO projects levels and rates for the factors that underlie potential GDP, such as growth of the labor force, capital services (the productive services provided by the economy's capital stock), and productivity. In making those projections, CBO takes into account the effect that fiscal policy may have on those variables under current law, but it does not attempt to forecast fluctuations in the business cycle beyond 2013.

Potential Output

Potential GDP is expected to grow at an average annual rate of 2.2 percent during the 2009–2019 period, virtually the same as CBO projected last March. The projection for potential output in the nonfarm business sector—average annual growth of 2.6 percent during the 10-year period—also changed very little. Although the variables underlying potential GDP in that sector were revised—potential hours worked and capital accumulation grow slightly more slowly in the current projection, and the growth in potential total factor productivity (the growth that is not explained by increases in potential employment and hours or the capital stock) is slightly higher—the changes were small and largely offset each other.

The primary source of revision to potential GDP is a change to the projection for potential output in sectors other than nonfarm business, most notably in the housing and federal government sectors. CBO's projections of real investment in residential housing and growth in the compensation of federal employees are lower than they were in March, which accounts for the downward revision to the projected growth in potential output in those two sectors.

Inflation and Interest Rates

Inflation measured by the CPI-U averages 1.9 percent annually from 2014 through 2019 in CBO's projection. That outlook reflects CBO's view that the Federal Reserve will be able to maintain the rate of CPI-U inflation near the top of its target range. As measured by the GDP price index, CBO expects inflation to average 1.6 percent during the final six years of the projection period. The GDP price index generally grows more slowly than the CPI-U because it contains a different mix of goods and services.

CBO's projections for interest rates are similar to those issued in March. From 2014 to 2019, the rate on 3-month Treasury bills averages 4.7 percent and the rate on 10-year Treasury notes averages 5.5 percent, in both cases up a few basis points relative to the March forecast. CBO's projections of interest rates in the latter part of the projection period derive from its projections of CPI-U inflation and real interest rates, which are based on analyses of historical average rates and trends in the real return to capital. The real rates on 3-month Treasury bills and 10-year Treasury notes during the 2014–2019 period are expected to average 2.8 percent and 3.6 percent, respectively.

Income

CBO projects federal revenues on the basis of various categories of income as measured in the national income and product accounts. Revenues are most directly affected by wages and salaries, domestic corporate profits, proprietors' income, and interest and dividend income.

CBO's measure of labor income consists of the total compensation that employers pay their employees—that is, the sum of wages and salaries and supplemental benefits—and 65 percent of proprietors' income (a commonly used estimate of the proportion of proprietors' income that represents compensation for the personal work they put into the enterprise).[13] Supplemental benefits include employers' payments for health and other insurance premiums, their contributions to pension funds, and their share of payroll taxes (for Social Security and Medicare).

CBO's projections assume that labor income will return to its historical average share of GDP sometime during the projection period. Because that share is currently almost 2 percentage points below its historical average, the forecast assumes that it will grow significantly over the next 10 years. In the near term, however, labor income will remain depressed by high unemployment and very slow growth in hourly wages.

Domestic corporate profits, another important type of income for revenue projections, also fell sharply during the recession, but they are likely to rebound this year. Domestic economic profits fell below 6 percent of GDP early this year, the lowest share of GDP since the 1982 recession. (Economic profits differ from book profits—those reported by corporations—because they remove the effects of tax law on the timing of depreciation.) Corporate profits traditionally rise early in the recovery of the business cycle, however, and preliminary data for the first half of this year indicate that they are already strengthening. CBO's projections assume that domestic profits will

13. The assumption of 65 percent is discussed in Douglas Gollin, "Getting Income Shares Right," *Journal of Political Economy,* vol. 110, no. 2 (April 2002), pp. 458–474.

bounce back over the next three years, to about 8 percent of GDP, and average about that rate from 2014 through 2019.

Changes in the Outlook Since March 2009

The current CBO forecast is less favorable in the short run than the one it prepared in March (see Table 2-3). Although real GDP declines less in 2009 than had been previously forecast, the recovery in both 2010 and 2011 is weaker. A recovery strong enough to begin to close the sizable output gap does not start until mid-2010 in the current forecast, compared with early 2010 in the March forecast.

The unemployment rate is higher during the next several years in the current forecast than in the March forecast. That difference is mostly due to the unexpectedly steep, continuing deterioration in labor market conditions since that forecast was completed, but it also reflects slower projected growth in 2010 and 2011. Thus, in CBO's current forecast, the unemployment rate averages 10.2 percent in 2010 and 9.1 percent in 2011, compared with 9.0 percent and 7.7 percent, respectively, in the March forecast. That deterioration, along with the recent sharp deceleration in wage growth, reduces the share of GDP going to wages and salaries to below what it was in the March forecast.

CBO still anticipates a significant deceleration in the rate of consumer price inflation in the near term. That deceleration, however, is slightly less pronounced than in the forecast issued in March. The main reasons for the change are that energy prices are higher than had been expected and that the rate of increase in rents is slowing, although by less than in the previous forecast.

Short-term interest rates are lower than in the March forecast. CBO expects that the bleaker employment picture and the likelihood of slower growth will cause the Federal Reserve to maintain the target federal funds rate at its current low rate for longer than had previously been assumed. However, longer-term rates are significantly higher, reflecting the unexpected jump in those rates over the past several months.

Overall, the outlook for 2014 through 2019 is very similar to the one issued in March; differences in the two are small and largely offsetting. One notable change is the significantly higher share of GDP attributed to economic profits. That change reflects CBO's reassessment of the allocation of business income, with more of such income attributed to profits and less to debt service than in the previous forecast.

How CBO's Forecast Compares with Others

Because CBO must assume current law when compiling its forecast, comparisons with other forecasts are complicated. Under current law, significant increases in personal tax rates are scheduled to take effect in 2011. Most other forecasters probably assume that the Congress will enact legislation to prevent at least some of those increases from occurring. Compared with such an assumption, current law would be expected to yield weaker growth in GDP, higher unemployment, and lower interest rates in 2011.

CBO's forecast for 2009 calls for a slightly smaller decline than do many private-sector forecasts, but CBO anticipates a slightly weaker recovery in 2010 (see Table 2-4). (The most recent *Blue Chip* survey [comprising about 50 private-sector forecasts] does not provide a forecast for 2011.) The 10.2 percent unemployment rate in CBO's forecast for 2010 is slightly higher than the 9.9 percent average of the *Blue Chip* consensus. Compared with the Federal Reserve's forecast, CBO expects growth at the top of the central tendency for 2009, and in the middle for 2010 (see Table 2-5). For 2011, CBO's growth forecast is at the bottom of the central tendency, perhaps reflecting a difference in assumptions about fiscal policy. For unemployment, CBO's is above the central tendency (but within the range of forecasts) in 2010 and is within the central tendency in 2011.[14]

Inflation in consumer prices in 2010 in CBO's forecast is slightly below that of the *Blue Chip* consensus. CBO's forecast for inflation is below the Federal Reserve's central tendency, with the difference, initially very small, growing in 2010 and 2011.

Interest rates in CBO's forecast—both the 3-month Treasury bill and the 10-year Treasury note—are similar in 2009 and 2010 to those of the August *Blue Chip*

14. The central tendency represents the range of projections by members of the Federal Open Market Committee, excluding the three highest and three lowest projections for each variable in a given year.

Table 2-3.

CBO's Current and Previous Economic Projections for Calendar Years 2009 to 2019

	Forecast			Projected Annual Average	
	2009	2010	2011	2012-2013	2014-2019
Nominal GDP (Billions of dollars)					
August 2009	14,163	14,570	15,146	16,799 [a]	21,320 [b]
March 2009	14,047	14,576	15,233	16,684 [a]	21,164 [b]
Nominal GDP (Percentage change)					
August 2009	-0.7	2.9	4.0	5.3	4.1
March 2009	-1.5	3.8	4.5	4.7	4.0
Real GDP (Percentage change)					
August 2009	-2.5	1.7	3.5	4.7	2.5
March 2009	-3.0	2.9	4.0	4.0	2.6
GDP Price Index (Percentage change)					
August 2009	1.8	1.1	0.4	0.6	1.5
March 2009	1.5	0.8	0.5	0.6	1.4
Consumer Price Index[c] (Percentage change)					
August 2009	-0.5	1.7	1.3	1.1	1.9
March 2009	-0.7	1.4	1.2	1.0	1.7
Unemployment Rate (Percent)					
August 2009	9.3	10.2	9.1	6.4	4.8
March 2009	8.8	9.0	7.7	6.1	4.9
Three-Month Treasury Bill Rate (Percent)					
August 2009	0.2	0.6	1.7	3.6	4.7
March 2009	0.3	0.9	1.8	3.4	4.7
Ten-Year Treasury Note Rate (Percent)					
August 2009	3.3	4.1	4.4	4.8	5.5
March 2009	2.9	3.4	4.0	4.8	5.5
Tax Bases (Billions of dollars)					
Economic profits					
August 2009	1,336	1,443	1,584	1,852 [a]	2,387 [b]
March 2009	1,269	1,386	1,547	1,764 [a]	1,940 [b]
Wages and salaries					
August 2009	6,465	6,614	6,792	7,672 [a]	9,773 [b]
March 2009	6,496	6,743	6,953	7,662 [a]	9,709 [b]
Tax Bases (Percentage of GDP)					
Economic profits					
August 2009	9.4	9.9	10.5	10.9	11.1
March 2009	9.0	9.5	10.2	10.5	9.7
Wages and salaries					
August 2009	45.6	45.4	44.8	45.5	45.9
March 2009	46.2	46.3	45.6	46.0	45.9
Memorandum:					
Real Potential GDP (Percentage change)					
August 2009	2.2	1.7	1.7	2.3	2.4
March 2009	2.3	1.8	1.7	2.3	2.4

Sources: Congressional Budget Office.

Note: GDP = gross domestic product; percentage changes are measured from one year to the next.

The dollar values for nominal GDP and the tax bases are derived from data from the national income and product accounts that were available at the end of June 2009 and do not reflect the July revisions. Economic projections for each year from 2009 to 2019 are available at www.cbo.gov/spreadsheets.shtml.

a. Level in 2013.

b. Level in 2019.

c. The consumer price index for all urban consumers.

Table 2-4.

Comparison of Economic Projections by CBO and the *Blue Chip* for Calendar Years 2009 to 2019

	Forecast			Projected Annual Average	
	2009	2010	2011	2012–2013	2014–2019
Nominal GDP (Billions of dollars)					
CBO	14,163	14,570	15,146	16,799 [a]	21,320 [b]
Blue Chip	14,093	14,615	n.a.	n.a.	n.a.
Nominal GDP (Percentage change)					
CBO	-0.7	2.9	4.0	5.3	4.1
Blue Chip	-1.2	3.7	n.a.	n.a.	4.9 [c]
Real GDP (Percentage change)					
CBO	-2.5	1.7	3.5	4.7	2.5
Blue Chip	-2.6	2.3	n.a.	n.a.	2.6 [c]
GDP Price Index (Percentage change)					
CBO	1.8	1.1	0.4	0.6	1.5
Blue Chip	1.4	1.4	n.a.	n.a.	2.3 [c]
Consumer Price Index [d] (Percentage change)					
CBO	-0.5	1.7	1.3	1.1	1.9
Blue Chip	-0.5	1.9	n.a.	n.a.	2.5 [c]
Unemployment Rate (Percent)					
CBO	9.3	10.2	9.1	6.4	4.8
Blue Chip	9.3	9.9	n.a.	n.a.	5.5 [c]
Three-Month Treasury Bill Rate (Percent)					
CBO	0.2	0.6	1.7	3.6	4.7
Blue Chip	0.2	0.7	n.a.	n.a.	4.2 [c]
Ten-Year Treasury Note Rate (Percent)					
CBO	3.3	4.1	4.4	4.8	5.5
Blue Chip	3.4	4.1	n.a.	n.a.	5.4 [c]

Sources: Congressional Budget Office; Aspen Publishers, Inc., *Blue Chip Economic Indicators* (August 10, 2009).

Note: GDP = gross domestic product; n.a. = not available.

Percentage changes are measured from one year to the next.

The dollar values for nominal GDP are based on data from the national income and product accounts that were available at the end of June 2009 and do not reflect the July revisions. Economic projections for each year from 2009 to 2019 are available at www.cbo.gov/spreadsheets.shtml.

a. Level in 2013.

b. Level in 2019.

c. Projected annual average growth for 2016 to 2020, from Aspen Publishers, Inc., *Blue Chip Economic Indicators* (March 10, 2009).

d. The consumer price index for all urban consumers.

consensus. (The Federal Reserve does not reveal its forecasts of interest rates.)

CBO's projection of the growth of GDP after 2013—when in CBO's forecast the level of GDP reaches its potential—is very similar to the *Blue Chip* projection for the same period. In those years, CBO projects both lower unemployment and lower inflation than the *Blue Chip* survey and interest rates that are slightly higher than the *Blue Chip's*.

CBO's projections for the later years of the 10-year horizon also can be compared with the Federal Reserve's "longer-run projections" for the unemployment rate and

Table 2-5.

Comparison of Economic Forecasts by the Federal Reserve and CBO for Calendar Years 2009, 2010, and 2011

	Federal Reserve[a]		
	Range	Central Tendency	CBO
	2009		
	Fourth Quarter to Fourth Quarter (Percentage change)		
Real GDP	-1.6 to -0.6	-1.5 to -1.0	-1.0
PCE Price Index	1.0 to 1.8	1.0 to 1.4	1.2
Core PCE Price Index[b]	1.2 to 2.0	1.3 to 1.6	1.7
	Average Level, Fourth Quarter (Percent)		
Civilian Unemployment Rate	9.7 to 10.5	9.8 to 10.1	10.1
	2010		
	Fourth Quarter to Fourth Quarter (Percentage change)		
Real GDP	0.8 to 4.0	2.1 to 3.3	2.8
PCE Price Index	0.9 to 2.0	1.2 to 1.8	1.1
Core PCE Price Index[b]	0.5 to 2.0	1.0 to 1.5	0.8
	Average Level, Fourth Quarter (Percent)		
Civilian Unemployment Rate	8.5 to 10.6	9.5 to 9.8	9.9
	2011		
	Fourth Quarter to Fourth Quarter (Percentage change)		
Real GDP	2.3 to 5.0	3.8 to 4.6	3.8
PCE Price Index	0.5 to 2.5	1.1 to 2.0	0.8
Core PCE Price Index[b]	0.2 to 2.5	0.9 to 1.7	0.5
	Average Level, Fourth Quarter (Percent)		
Civilian Unemployment Rate	6.8 to 9.2	8.4 to 8.8	8.5

Sources: Congressional Budget Office; Federal Reserve Board, "Summary of Economic Projections for the Meeting of June 23–24, 2009" (July 15, 2009).

Note: GDP = gross domestic product; PCE = personal consumption expenditure.

a. The range of estimates from the Federal Reserve reflects all views of the members of the Federal Open Market Committee. The central tendency reflects the most common views of the committee's members.

b. Excludes prices for food and energy.

for inflation. The latter may be interpreted as the FOMC's estimates of the unemployment rate that is sustainable in the long run and of the inflation rate that is consistent with the dual objectives of maximum employment and price stability.[15] CBO's projection of the unemployment rate from 2016 to 2019, at 4.8 percent, is within the Federal Reserve's central tendency of 4.8 percent to 5.0 percent, and CBO's projection of 1.7 percent inflation as measured by the PCE price index is at the low end of the Federal Reserve's central tendency of 1.7 percent to 2.0 percent.

15. The Federal Reserve does not specify which years are covered by its longer-run projections. In CBO's projections, the growth of potential GDP is not constant but generally slows in later years for demographic reasons. Thus, the Federal Reserve's projection for the growth of real GDP (a central tendency of 2.5 percent to 2.7 percent) cannot be directly compared with CBO's projections for any specific set of years.

APPENDIX

A

Changes in CBO's Baseline Since March 2009

The Congressional Budget Office (CBO) updates its baseline budget projections each summer to illustrate the paths that federal spending and revenues are projected to take over the next 10 years under current laws and policies. The updated baseline presented in this report reflects revisions to CBO's economic forecast and the effects of legislation enacted since March, when CBO completed its previous baseline projections.[1] In addition, CBO has updated some projections in response to new information about the operations of certain programs.

CBO constructs its baseline in accordance with the provisions set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 and in the Congressional Budget and Impoundment Control Act of 1974. (Although the provisions of the Deficit Control Act that pertain to the baseline expired at the end of September 2006, the agency generally continues to follow that law's specifications in preparing its baseline.) To project revenues and mandatory spending, CBO assumes that current laws continue unchanged in the future, with only a few exceptions.[2] That approach includes the assumption that various changes in tax law enacted since 2001 will expire as scheduled—by the end of December 2010—causing revenues to increase thereafter. Similarly, the baseline also reflects the assumption that reductions in Medicare payments for physicians' services will occur as called for in current law. To project discretionary spending, CBO adjusts the current year's appropriations—with the exception of those funded in the American Recovery and Reinvestment Act of 2009 (ARRA)—to reflect the effects of inflation and certain other factors, as specified in the Deficit Control Act.[3] 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 effects of spending or revenue proposals.

Since March, CBO has decreased its estimate of the deficit for 2009 by $80 billion, to $1.6 trillion (see Table A-1). Both outlays and revenues are now expected to be lower than previously estimated, by $165 billion and $85 billion, respectively. A large drop ($203 billion) in the estimated subsidy cost of the Troubled Asset Relief Program (TARP) dominates the reduction in projected outlays for 2009; other changes (mostly in revenues) increase the projected deficit for this year by $123 billion relative to CBO's March projection.

The net impact of CBO's updates since March has been to increase projected deficits from 2010 through 2019. In March, CBO projected a cumulative deficit of $4.4 trillion over the 10-year period; the current baseline shows a cumulative deficit of $7.1 trillion. About half of the increase is the result of extrapolations related to supple-

1. Those projections were published in Congressional Budget Office, *A Preliminary Analysis of the President's Budget and an Update of CBO's Budget and Economic Outlook* (March 2009).

2. The Deficit Control Act specified that mandatory spending programs whose authorizations are set to expire should be assumed to continue if they have outlays of more than $50 million in the current year and were established on or before the date the Balanced Budget Act of 1997 was enacted. (Programs established after that date are not automatically assumed to continue.) The Deficit Control Act also specified that expiring excise taxes whose revenues are dedicated to trust funds should be assumed to be extended at their current rates. (The law did not provide for the extension of other expiring tax provisions, even if they had been routinely extended in the past.)

3. With the agreement of the budget committees, the $283 billion in discretionary funding originally provided in ARRA is not extrapolated in CBO's baseline. Public Law 111-47, enacted this summer, provided additional funding for the program known as Cash for Clunkers and covered the cost of that supplemental funding by rescinding $2 billion previously provided in ARRA; thus, net discretionary funding under ARRA has been reduced to $281 billion.

Table A-1.

Changes in CBO's Baseline Projections of the Deficit Since March 2009

(Billions of dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
Total Deficit (-) as Projected in March 2009	**-1,667**	**-1,139**	**-693**	**-331**	**-300**	**-310**	**-282**	**-327**	**-312**	**-325**	**-423**	**-2,772**	**-4,441**
Changes to Revenue Projections													
Legislative	*	7	3	-10	-12	12	*	*	*	*	*	*	1
Economic	11	-6	-31	-31	-13	-11	-4	3	12	27	46	-91	-6
Technical	-97	-72	-39	-36	-36	-35	-28	-27	-31	-30	-34	-217	-368
Total Changes to Revenues	**-85**	**-70**	**-67**	**-76**	**-61**	**-33**	**-33**	**-24**	**-18**	**-3**	**13**	**-307**	**-372**
Changes to Outlay Projections													
Legislative changes													
Mandatory outlays													
Deposit insurance	2	12	-1	*	-1	-2	-3	-3	-2	-1	*	8	-2
Other	*	*	*	*	*	*	*	*	*	*	*	*	1
Subtotal, mandatory	2	12	-1	*	-1	-2	-3	-3	-2	-1	*	8	-1
Discretionary outlays													
Defense	25	55	72	78	81	83	84	86	86	87	90	369	802
Nondefense	5	19	23	26	26	28	29	29	30	30	31	122	272
Subtotal, discretionary	30	74	95	104	107	110	113	115	116	118	121	491	1,074
Net interest outlays (Debt service)	*	1	3	7	13	21	28	36	45	54	64	44	272
Subtotal, legislative changes	**31**	**87**	**97**	**111**	**120**	**129**	**137**	**148**	**159**	**171**	**185**	**544**	**1,344**
Economic changes													
Mandatory outlays													
Social Security	0	0	*	1	2	3	5	6	6	7	8	5	36
Unemployment compensation	9	14	19	10	-1	-3	-3	*	*	-1	*	38	34
Medicare	0	-2	-6	-5	-4	-3	-2	-1	-2	-2	-3	-20	-29
Other	4	4	3	4	2	3	5	5	4	4	4	16	39
Subtotal, mandatory	13	15	16	8	-2	*	5	9	8	8	9	39	79
Discretionary outlays	*	-3	-4	-3	*	3	5	6	8	9	11	-7	32
Net interest outlays													
Debt service	*	*	1	2	3	4	6	7	8	9	9	10	49
Rate effect/inflation	1	5	-8	-18	-1	9	10	9	11	13	14	-12	44
Subtotal, net interest	1	5	-7	-16	2	13	15	16	19	22	24	-2	93
Subtotal, economic changes	**14**	**18**	**5**	**-10**	*	**16**	**26**	**31**	**35**	**40**	**43**	**29**	**205**

Continued

Table A-1. Continued

Changes in CBO's Baseline Projections of the Deficit Since March 2009

(Billions of dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total, 2010-2014	Total, 2010-2019
Changes to Outlay Projections (Continued)													
Technical changes													
Mandatory outlays													
TARP	-203	60	15	10	3	*	*	*	*	*	*	88	88
Medicare	1	1	1	2	4	5	6	8	9	9	9	13	54
Medicaid	-4	1	1	1	1	1	1	1	2	1	1	4	11
Unemployment compensation	7	1	1	1	1	1	1	1	1	1	1	4	7
First-Time Home Buyer Credit	7	1	0	0	0	0	0	0	0	0	0	1	1
Deposit insurance	-2	-22	0	13	6	0	-1	*	*	1	2	-3	-1
Other	-13	-2	5	4	4	4	4	4	1	2	2	16	29
Subtotal, mandatory	-207	39	24	31	18	11	11	13	13	14	15	122	188
Discretionary outlays	-9	5	-6	2	1	1	1	1	1	1	1	3	8
Net interest outlays													
Debt service	*	1	4	10	19	34	41	40	47	49	56	69	301
Other	6	21	37	40	20	24	26	36	41	19	12	141	276
Subtotal, net interest	6	23	42	50	38	58	68	76	88	69	68	210	578
Subtotal, technical changes	**-211**	**66**	**59**	**82**	**58**	**70**	**80**	**90**	**101**	**84**	**84**	**335**	**774**
Total Changes to Outlays	**-165**	**172**	**162**	**183**	**178**	**215**	**243**	**269**	**295**	**295**	**312**	**908**	**2,323**
Total Impact on the Deficit[a]	**80**	**-242**	**-228**	**-259**	**-238**	**-248**	**-276**	**-293**	**-314**	**-298**	**-299**	**-1,216**	**-2,695**
Total Deficit as Projected in August 2009	**-1,587**	**-1,381**	**-921**	**-590**	**-538**	**-558**	**-558**	**-620**	**-626**	**-622**	**-722**	**-3,988**	**-7,137**
Memorandum:													
Total Legislative Changes[a]	-31	-80	-94	-121	-132	-117	-137	-148	-159	-171	-184	-543	-1,343
Total Economic Changes[a]	-3	-24	-36	-20	-13	-26	-31	-28	-23	-13	3	-120	-211
Total Technical Changes[a]	114	-138	-98	-118	-94	-105	-108	-117	-132	-114	-118	-552	-1,141

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.

mental appropriations enacted in June (mostly to finance military operations in Iraq and Afghanistan) and the interest costs associated with the added borrowing. Under the rules governing baseline projections, such funding is assumed to continue at the same level in real terms (that is, adjusted only for inflation) in future years; as a result, the appropriation of that $106 billion for 2009 adds close to $1.1 trillion (plus interest costs) to projected deficits. Technical updates to the projections, mostly involving reductions in revenues and increases in interest costs, account for another $1.1 trillion increase in the 10-year deficit projection. Revisions to CBO's economic assumptions have had a much smaller impact on the cumulative deficit projection, leading to an increase of $211 billion over the 2010–2019 period.

Changes to Projections of Outlays

Since March, CBO has lowered its estimate of outlays for 2009 by $165 billion. That decrease represents the net effect of a drop in outlays of $211 billion because of technical changes (mostly related to lower outlays projected for the TARP), which is partially offset by increased outlays resulting from legislative changes and economic updates (a combined increase of $46 billion). However, for the 2010–2019 period, total outlays are up by $2.3 trillion, mostly stemming from projected increases in net interest outlays ($943 billion) and from supplemental appropriations for 2009 and the extrapolation of that funding into future years ($1.1 trillion).

Legislative Changes

Legislation enacted since CBO prepared its March baseline results in additional projected outlays totaling $31 billion in 2009 and $1.1 trillion over the 2010–2019 period, plus an estimated $272 billion in resulting debt-service costs. Such changes result primarily from extrapolating recent supplemental funding through the end of the period and account for the largest increases to the baseline deficit in all years other than 2009.

Supplemental Appropriations. The Supplemental Appropriations Act of 2009 (P.L. 111-32) provides $106 billion for 2009 for both defense and nondefense activities. Much of that funding ($80 billion) is in support of military operations in Iraq and Afghanistan. For nondefense programs, P.L. 111-32 provides $26 billion in 2009: $15 billion for international affairs programs; $8 billion to prepare for a possible flu pandemic; and $3 billion for other programs and activities. As a result of that funding, CBO added $25 billion to its estimate of defense outlays and $4 billion to its estimate of nondefense outlays in 2009. (Although much of the $106 billion will be obligated in 2009, disbursement of the funds—especially for the procurement of weapons and military hardware—takes longer.) Additional supplemental funding was provided in other legislation for the Consumer Assistance to Recycle and Save (CARS) program (see below.) After extrapolating all the supplemental funding, with adjustments for inflation, the baseline includes an additional $802 billion in outlays for defense and $272 billion in outlays for nondefense programs over the 2010–2019 period.

Public Law 111-47 extends the CARS program (known as Cash for Clunkers) by providing an additional $2 billion in funding for 2009.[4] The program's original funding of $1 billion was provided this year in P.L. 111-32. CBO expects that most of that original $1 billion will be spent in fiscal year 2009 and that most of the recently enacted $2 billion increase will be spent in fiscal year 2010. (The program is authorized through November 1, 2009; federal outlays occur when the Department of Transportation reimburses dealers for claims under the program, not at the time of sale.) Following the rules governing baseline projections of discretionary spending, CBO assumes that such funding will continue in subsequent years (with adjustments for inflation), increasing estimated outlays by $22 billion from 2010 to 2019.

Deposit Insurance. The Helping Families Save Their Homes Act of 2009 (P.L. 111-22) makes several changes to the insurance programs administered by the Federal Deposit Insurance Corporation (FDIC) and the National Credit Union Administration (NCUA). That law temporarily increases (until December 31, 2013) the amount of individual deposits insured by those agencies from $100,000 to $250,000. It also allows the agencies to replenish their insurance funds over a longer period of time and increases the amounts each agency can borrow from the Treasury. CBO estimates that the new law will increase net outlays by about $2 billion in 2009 and by $12 billion in 2010, but those costs are expected to be offset over the 2011–2019 period by additional insurance premiums and proceeds from the sale of assets from failed institutions.

Economic Changes

As part of its updated economic forecast, CBO modified its projections of a number of economic variables—including the unemployment rate, interest rates, and prices—that are used to estimate outlays. Such revisions have caused the agency to increase its estimate of outlays by $14 billion for 2009 and by a total of $205 billion over the 2010–2019 period.

Social Security. CBO's revised economic forecast raises the estimated cost-of-living adjustments (COLAs) that Social Security beneficiaries will receive, starting in 2012, by an average of about 0.2 percentage points per year through 2019. (In March, CBO projected no COLA increase for the years 2010 through 2012, but the revised economic forecast leads CBO to now project a small COLA in 2012.) The increase in expected benefits result-

4. To provide the additional $2 billion in funding for CARS, an equal amount of funding, originally provided under ARRA, was transferred from the Department of Energy's Title XVII loan program. That stimulus funding was not extrapolated in the baseline; rescinding such funding reduces projected outlays by $2 billion between 2012 and 2014.

ing from the increased COLA is partially offset by a decrease in projected average wages. Together, those changes increase estimated benefit payments by $1 billion in 2012; expected additional outlays increase annually, reaching an estimated $8 billion in 2019. In total, projected Social Security benefits have risen by $36 billion (or 0.4 percent) over the 10-year projection period.

Unemployment Benefits. CBO has raised its forecast of the unemployment rate significantly for the next few years. Compared with the annual rates projected in March, CBO now estimates that the unemployment rate will be 0.4 percentage points higher in 2009 and about 1 percentage point higher over each of the following three years. Because a higher rate of unemployment means that more individuals will draw benefits in those years, CBO has raised projected outlays for unemployment compensation by $9 billion in 2009 and by a total of $34 billion over the 2010–2019 period. The largest outlay increases are expected to occur in 2010 ($14 billion) and 2011 ($19 billion).

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 prices in those settings. Because CBO has lowered its projection of the price indexes upon which Medicare payment rates are based, its estimate of Medicare spending has diminished by a total of $29 billion over the 2010–2019 period, or by an average of $3 billion per year.

Discretionary Outlays. CBO projects spending for discretionary programs using the gross domestic product (GDP) price index and the employment cost index (ECI) for wages and salaries. For most years of the forecast, CBO has slightly increased its estimate of the growth in the GDP price index relative to its previous forecast; but, compared with the projections made in March, the ECI is substantially lower in both 2010 and 2011. Those changes generate lower projections of discretionary outlays for 2010 through 2012 but a net increase of $32 billion over the 10-year period.

Net Interest. As a result of economic factors, CBO has increased its estimate of net interest outlays for the 2010–2019 period by $93 billion. In the baseline, projections of higher spending and lower revenues stemming from updated economic assumptions boost projected federal debt and add $49 billion to debt-service costs for the 10-year period. In addition, CBO now projects slightly higher interest rates for borrowing by the Treasury, as compared with the March forecast. Those higher rates add $44 billion to projected outlays through 2019.

Technical Changes

For 2009, technical revisions to CBO's estimates (those that do not stem from changes in legislation or updated economic assumptions) produce a net decrease in outlays of $211 billion. The largest change for this year results from an adjustment to the subsidy calculated for activities related to the TARP; CBO has lowered its estimate of outlays for that program by $203 billion. Other technical changes reduce estimated discretionary outlays by another $9 billion in 2009. For the 2010–2019 period, technical changes increase projected outlays by a total of $774 billion, mostly as a result of higher projected outlays for the TARP, Medicare, and net interest.

TARP. CBO has reduced projected outlays for the program by $203 billion for 2009 and increased them by $88 billion over the 2010–2019 period. Two factors account for most of the decrease in 2009: Market conditions have improved since CBO released its baseline estimate in March, and CBO now expects that the full $699 billion currently authorized for the program will not be used.[5] In its March baseline, CBO estimated that nearly all spending related to the TARP would occur in 2009, with spending of the remainder occurring in 2010; CBO now anticipates that a greater amount of TARP spending will occur in 2010 (versus 2009) than was previously estimated. In addition, the Administration's initiative to mitigate housing foreclosures is now expected to result in annual outlays from 2010 to 2013, which translates into higher TARP spending in those years.

The improvement in market conditions results in a reduction in the subsidy rate associated with the Capital Purchase Program (CPP)—a major initiative through which the government purchases preferred stock and warrants (for the future purchase of common stock) from banks. CBO has dropped the projected subsidy for the remaining investments in that program from 35 percent in the March baseline to 13 percent. The decrease in the estimated CPP subsidy cost also reflects banks' repurchase

5. Authority for the TARP was originally set to a maximum of $700 billion; that total was reduced by $1.3 billion under the Helping Families Save Their Homes Act of 2009.

of $70 billion of preferred stock through June. Similarly, the estimated subsidy cost for other investments in preferred stock (for example, that of American International Group) has also been reduced. Partially offsetting those reductions in projected costs is the expansion of assistance to the automotive industry; CBO has raised its estimate of the costs of that assistance by nearly $40 billion relative to the March baseline.

Some major initiatives that were anticipated to be funded through the TARP, such as the Public-Private Investment Program and the Term Asset-Backed Securities Loan Facility, have been slow to gain traction since being announced. Taking into account the waning interest that institutional investors have exhibited in those initiatives, increased stability in the financial markets, and the early exit of banks from the CPP, CBO now estimates that the TARP will use about $600 billion of its currently authorized total of $699 billion.

Medicare. For the 2010–2019 period, CBO has raised its projections of outlays for Medicare by a total of $54 billion as a result of technical changes; those increases range from $1 billion in 2010 to an additional $9 billion per year in the final three years of the period. The increases stem largely from the Administration's announcement of a proposed rule that would raise Medicare's payment rates for physicians' services. That rule would remove physician-administered drugs from the calculation of the sustainable growth rate formula, which, under current law, would be used to update those payment rates. Such a change would result in higher payment rates for physicians' services than in previous baseline projections. CBO's baseline incorporates 50 percent of the estimated effect on spending of implementing that proposed rule. If the rule becomes final, CBO will incorporate the full effect in subsequent baseline projections.

Unemployment Compensation. For technical reasons, CBO has increased its estimate of outlays for unemployment compensation in 2009 by $7 billion. (That increased projection is in addition to the $9 billion increase attributable to changes in this year's economic outlook). Even after accounting for the increase in the unemployment rate (an economic factor), claims this year for unemployment benefits and average benefits (considered technical factors) have been higher than CBO anticipated, adding further to estimated outlays for 2009. In each of the following years, projected spending has been raised by just under $1 billion to reflect higher estimated benefit payments.

Refundable Tax Credit for First-Time Home Buyers. CBO has increased its estimate of the refundable portion of the First-Time Home Buyer Tax Credit by $7 billion for 2009 and by nearly $1 billion for 2010, largely to reflect higher-than-anticipated outlays recorded by the Treasury so far this year.[6]

Deposit Insurance. CBO has revised its baseline projections for deposit insurance to account for changes in the timing of expenditures and receipts stemming from the failure of federally insured banks, thrift institutions, and credit unions. Such failures increase federal spending in the short run when the FDIC and NCUA make payments to provide liquidity to failed institutions or cover insured deposits; but they reduce outlays in future years as the agencies sell assets held by those institutions and raise insurance premiums to offset any losses. On the basis of trends through July, CBO has lowered its estimate of net outlays for 2010 by $22 billion and raised its estimate for the 2011–2019 period by a similar amount. CBO also has reduced its estimate of net outlays in 2009 by $2 billion to reflect higher-than-anticipated receipts from fees paid by firms participating in the FDIC's Temporary Liquidity Guarantee Program.

Other Mandatory Programs. In estimating ARRA's effects on the budget, CBO expected that some of the government's costs of covering a share of the extended health insurance benefits provided under the Consolidated Omnibus Budget Reconciliation Act of 1985 (commonly called COBRA) would be classified as outlays. However, because that benefit is conveyed by reducing the amount of tax payments withheld by firms, the Administration has been recording those benefits as an offset to revenues; CBO has adopted that same treatment in its updated baseline projections. That change lowers both estimated outlays and revenues by $14 billion for 2009 and by about $10 billion over the following three years but has no effect on budget deficits. Other technical changes to mandatory programs include adjustments to outlay projections for the earned income and child tax credits, the Old-Age and Survivors Insurance benefits for Social

6. A tax credit reduces a taxpayer's overall tax liability. If the credit is refundable and the amount of the credit exceeds that liability, then the excess is refunded to the taxpayer. In that case, the excess is classified as an outlay in the federal budget.

Security, and several other programs. In total, such changes result in a decrease of $13 billion in outlays for 2009 and an increase of $29 billion in outlays over the 2010–2019 period.

Discretionary Programs. Both upward and downward adjustments in several areas of the budget have resulted in a decrease of $9 billion in estimated discretionary outlays for 2009 but a net increase of $8 billion for the following 10-year period. In particular, CBO has reduced its estimate of defense outlays for 2009 by $9 billion to reflect slower-than-expected spending to date.

Net Interest. As a result of technical updates, CBO's current estimate of net interest outlays is $6 billion higher for 2009 and $578 billion higher from 2010 through 2019 than the amounts projected in March. Part of that increase occurs because CBO anticipates that the Treasury will conduct future borrowing using longer-term securities (the Treasury recently expanded its issuance of 3-, 7-, and 10-year notes). Just over $300 billion of the 10-year increase arises from the higher debt resulting from that change as well as other technical updates to revenues and outlays in the baseline.

Some of the revisions to the interest projections are attributable to reduced estimates of interest received from the nonbudgetary credit financing accounts—specifically, reduced interest receipts as a result of lower anticipated borrowing to finance the TARP. (Those nonbudgetary accounts borrow from the Treasury to finance TARP investments and pay interest to the Treasury on that borrowing.) CBO now expects that some recipients of TARP assistance will repay the government's investments sooner than previously estimated and that new TARP investments will be less than previously projected. As a result, those financing accounts will borrow less from the Treasury (and pay less interest). Some of that difference will be offset because of reduced borrowing by the Treasury from the public.

Changes to Projections of Revenues

Since releasing its baseline projections in March, CBO has reduced its revenue projections by $85 billion for 2009 and by a total of $372 billion over the next decade. Those changes stem mainly from technical changes related to lower-than-expected tax collections this year, new modeling, and the availability of additional historical data.

Legislative Changes

On net, legislation enacted since March has had a small impact on projected revenues over the 10-year period. The Family Smoking Prevention and Tobacco Control Act (P.L. 111-31) has had the largest impact, increasing revenues on net by $1.5 billion over the 2010–2019 period. The law imposes new restrictions on the sale and advertisement of tobacco and authorizes the Food and Drug Administration to regulate tobacco products, which will result in less consumption of tobacco products and, consequently, lower receipts from excise taxes levied on those products by about $1.0 billion over the 10-year period. That reduction in receipts will be more than offset by changes the act makes to the Thrift Savings Plan for federal employees, which will add about $2.5 billion to revenues over the period.

Enactment of legislation that extends for one year the ban on imports from Burma (P.L. 111-42) will also affect revenues, but mainly because of provisions that govern the timing of payments of corporate income taxes. By itself, extending the import ban for one year will reduce customs duties by a small amount, about $2 million, in 2010. The legislation also revokes a number of provisions enacted in the past few years that require corporations to accelerate, at different times and in different amounts, their quarterly payments of income taxes. As a result, receipts in total will be unchanged, but they will be about $10 billion higher over the 2010–2011 period, $22 billion lower over the 2012–2013 period, and $12 billion higher in 2014.

Economic Changes

As a result of changes to its economic projections since March, CBO has made relatively small near-term adjustments, raising estimated revenues by $11 billion in 2009 and lowering them by $6 billion in 2010. Thereafter, CBO has lowered its projections of revenues by $31 billion in both 2011 and 2012 and by smaller annual amounts, totaling $28 billion, from 2013 through 2015. CBO then increased its projections for the 2016–2019 period by about $90 billion. Those changes stem largely from the updated outlook for nominal GDP, changes to the projected composition of GDP, and revised projections of individuals' earnings and mortgage interest payments.

In 2009, nominal GDP is expected to be higher than CBO indicated in the March forecast, reflecting both higher real GDP and higher prices. Corporate profits are projected to be higher as well, boosting the estimate of corporate income tax receipts. In addition, individuals' interest income is expected to be higher than CBO projected in March, raising individual income tax receipts.

CBO now anticipates a slower economic recovery and less employment in 2010 and 2011. Wages and salaries, the most highly taxed income, are projected to be lower than previously forecast, because of both the generally lower level of economic activity and a reduction in the wage and salary share of GDP. That change results in reduced projections of receipts from individual income and social insurance (payroll) taxes, particularly in 2011 and 2012 (because of the lag between when taxpayers earn income and when they pay taxes).

Several elements of CBO's updated economic outlook combine to reduce the agency's projection of revenues by smaller amounts from 2013 to 2015 and to raise its revenue projections from 2016 through 2019. Most important, nominal GDP is higher than CBO projected in March because the impact of higher expected prices exceeds the effects of reductions in projected real output. That difference becomes greatest over the 2017–2019 period and alone would result in higher revenues in each year after 2012. However, the composition of GDP in the forecast has changed since March: both wages and salaries and domestic economic profits begin the period after 2012 at a lower share of GDP than was previously projected, resulting in lower taxable incomes despite the higher GDP. By 2015, CBO projects that those taxable incomes will rise above the levels expected in March, as wages and salaries return to a similar share of GDP and profits rise to a higher share of GDP. One factor lowering revenues in all years is that the amount of mortgage interest paid on owner-occupied housing is now projected to be higher; most of that interest is deducted by taxpayers who itemize their tax deductions.

Technical Changes

CBO has lowered its projections of revenues by $97 billion in 2009, by $72 billion in 2010, and by $368 billion over the 2010–2019 period because of various technical factors—the most important of which is lower-than-expected receipts from corporate and individual income taxes this year. The impact of those lower recent tax collections diminishes and then largely disappears over the first half of the projection period. Projected revenues are lower in later years of the projection period as a result of several modeling changes and the incorporation of new historical data.

Changes to the economic forecast for 2009 would, in isolation, result in slightly higher income tax receipts, especially from corporate income taxes. However, collections of individual and corporate income taxes so far this year have been substantially below CBO's March projections. To reflect those lower collections, CBO has made downward technical adjustments to its estimate of those receipts of about $65 billion in 2009. CBO reduced its projection of receipts by a similar amount in 2010, and by amounts thereafter that diminish and then largely end by 2015. CBO phased out those adjustments because it anticipates that taxable income will eventually tend to return to its historical relationship to GDP. The factors that are responsible for the lower income tax collections will be better understood when further information becomes available from tax returns and other sources.[7]

A variety of changes to CBO's modeling and the incorporation of new data into the projections explain most of the other downward changes to revenues. The modeling changes include modifying the method used to project individual mortgage interest deductions; using information from estate tax returns to project estate and gift taxes; and altering the methods used to project itemized medical deductions and the nontaxable share of employees' compensation to better reflect expected growth in health care expenses. The newly available data include population estimates from the Social Security Administration that reduce the projections of taxable distributions from defined-contribution plans and data on the wage base for payroll taxes in 2008 that reduce the projections of social insurance revenues.

CBO has made technical changes that raise its estimate of revenues from one source: Federal Reserve earnings. On the basis of recent announcements and actions by the Federal Reserve, CBO now expects that the Federal Reserve's portfolio of securities will be larger than the

7. Additional information may indicate that adjustments attributed to technical factors instead reflect economic developments. For example, at the end of July, the Bureau of Economic Analysis made substantial downward revisions to the national income and product account measures of wages and salaries for early 2009. The lower level of wages and salaries helps explain much of the reductions in revenue projections for technical factors made in the baseline of March 2009; those reductions were based on declines in collections from income and payroll tax withholding.

agency anticipated in March. Most important, the Federal Reserve is expected to purchase and hold a significantly larger amount of mortgage-backed securities (MBSs) guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. Because CBO expects the Federal Reserve to pay much less for its sources of funds than it earns from those MBSs, the greater holdings will probably increase the Federal Reserve's profits, which are remitted to the Treasury as revenues. Those and other technical changes increase projected revenues from Federal Reserve earnings by about $50 billion over the 2010–2014 period.

One downward technical change represents a reallocation of spending and revenues that has no effect on the federal deficit. CBO has changed its baseline treatment of the government subsidies for COBRA health insurance coverage that were provided in ARRA. Because the provision lacks a direct, identifiable link to the tax liability of a business or individual and affects only the remittance of taxes, CBO treated the reduced withholding in its March projections as a federal payment to a business (that is, as an increase in spending, rather than a reduction in revenues). The Department of the Treasury, however, records the subsidy as a reduction in income tax receipts. To conform with that treatment in this baseline projection, CBO has shown about $14 billion in 2009 and $10 billion in 2010 as reductions in revenues rather than as outlays.

APPENDIX

B

The Government's Actions in Support of the Housing and Financial Markets

The turmoil in the housing and financial markets has generated a series of policy responses from various parts of the government—the Federal Reserve, the Department of the Treasury, and other agencies. Some responses have stemmed from existing authority, others from recent legislation. The tables in this appendix briefly describe the major policy actions taken by each entity.

The Federal Reserve

Many of the actions taken by the Federal Reserve derive from section 13(3) of the Federal Reserve Act. That section gives the central bank broad authority in "unusual and exigent circumstances" to extend credit directly to an "individual, partnership, or corporation." That authority has been used in a variety of new and innovative programs to provide about $1.5 trillion in financial support to banks, corporations, money market funds, and other institutions (see Table B-1).

Activities of the Federal Reserve are not directly recorded in the federal budget. Rather, each year its revenues—generated by interest on its holdings of securities, income from foreign currency holdings, fees received for services provided to institutions that accept monetary deposits from consumers (such as check clearing, funds transfers, and automated clearinghouse operations), and interest on loans to such institutions—minus its costs and contributions to its capital account are remitted to the Treasury and recorded in the budget as revenues. That income is typically in the range of $20 billion to $30 billion a year.[1]

Thus, recent actions by the Federal Reserve to address the turmoil in the markets may affect federal revenues through their impact on the amount of earnings that the Federal Reserve remits to the Treasury. Those earnings would be diminished by any losses incurred if creditors were unable to repay loans or if the assets acquired proved to be worth less than the cost to acquire them. Although the Federal Reserve loaned more than $1 trillion in 2008 through its various programs, it does not intend to subsidize borrowers by paying more for assets than they are worth, and it has structured the transactions to minimize the chance of losses to its portfolio. Nonetheless, losses are possible; for example, the Federal Reserve has already written down—by about $3 billion—the value of the assets it acquired in the takeover of Bear Stearns.

Although the total assets of the Federal Reserve have remained near $2 trillion since the end of last year, the composition of those assets has changed markedly since the Congressional Budget Office (CBO) first published this summary of policy actions in January. At that time, lending to support the housing market and financial institutions accounted for nearly $1.5 trillion of the Federal Reserve's assets, and the securities it held outright totaled about $500 billion. Since then, as participation in the various lending programs has fallen sharply, the Federal Reserve's holdings in those programs have declined to about $500 billion. Conversely, the Federal Reserve now holds about $1.5 trillion in mortgage-backed securities guaranteed by Fannie Mae and Freddie Mac, debt issued by those two entities, and Treasury securities.

1. The Federal Reserve is now paying interest on required reserves and excess balances held on behalf of financial institutions. The interest paid on those deposits is linked to the federal funds rate; the Congressional Budget Office estimates that the Federal Reserve will incur interest costs of less than $5 billion in 2009. Authorization to pay interest on such reserves came from the Emergency Economic Stabilization Act of 2008, which advanced the effective date of a provision of the Financial Services Regulatory Relief Act of 2006 that was slated to take effect in 2011.

The Department of the Treasury

Most of the actions taken by the Treasury were authorized by recent legislation. In July 2008, the Housing and Economic Recovery Act of 2008 (Public Law 110-289) authorized actions to provide support for the housing market. Among the provisions of that act was the authority for the Director of the Federal Housing Finance Agency and the Secretary of the Treasury to place Fannie Mae and Freddie Mac into conservatorship and take ownership interest in each company.[2]

In early October, the Emergency Economic Stabilization Act of 2008 (Division A of P.L. 110-343) established the Troubled Asset Relief Program (TARP), authorizing the Treasury to purchase $700 billion in assets to alleviate the crisis in credit markets (see Table B-2).[3] As of July 31, about $290 billion in disbursements to banks and other institutions in exchange for shares of stock and warrants (securities that entitle the holder to buy stock of the company that issued it, at a specified price) was outstanding.[4] That total includes nearly $80 billion in financial assistance that the TARP has provided to the automobile industry, about $50 billion of which was used to purchase common stock in the new General Motors.

Spending for some programs conducted by the Treasury—most notably, the TARP—will be recorded in the budget on a discounted present-value basis rather than on a cash basis. For those programs, the budget records the cost of the subsidy provided—that is, the cost resulting from interest subsidies, potential defaults on that lending, and other factors.

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

3. Authority for the TARP was originally set to a maximum of $700 billion; however, that amount was reduced by $1.3 billion in the Helping Families Save Their Homes Act of 2009.

4. In addition, about $70 billion of preferred stock has been repurchased as of July 31.

Other Agencies

A few other agencies have also taken actions in response to the turmoil in the markets, either through existing authority or on the basis of recent legislation. The Helping Families Save Their Homes Act of 2009 (P.L. 111-22) temporarily raised the limit on deposit insurance coverage—from $100,000 to $250,000—through December 31, 2013. Through existing authority to reduce systemic risks to the economy, the Federal Deposit Insurance Corporation established a program to enhance liquidity by guaranteeing debt issued by financial institutions as well as certain deposits in checking accounts and other non-interest-bearing accounts; it may also contribute to guarantees for a pool of Citigroup's assets using that existing authority (see Table B-3).

The Department of Housing and Urban Development (HUD) has established several programs in an attempt to reduce foreclosures and address other issues in the housing market. Many of those programs were created by the Housing and Economic Recovery Act, but HUD has also used existing authority to create the FHA Secure program.

Other agencies have implemented programs in support of the housing market. The Federal Housing Finance Agency, also using authority granted by the Housing and Economic Recovery Act of 2008, placed Fannie Mae and Freddie Mac under conservatorship. In March, the Administration announced the Making Home Affordable plan, which includes two programs that aid homeowners by helping them modify or refinance their mortgages. That plan is administered by multiple federal entities.

Financial turmoil has also affected credit unions. As a result, the National Credit Union Administration has created programs (under existing authority) to ensure the liquidity of its member institutions.

Table B-1.

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of August 12, 2009

(Billions of dollars)

Action	Funding: Disbursed	Funding: Potential[a]	Description
Reductions in Interest Rates	n.a.	n.a.	The target for the federal funds rate (the interest banks charge on loans to other banks) was reduced 10 times between September 2007 and December 2008, falling from 5.25 percent to between zero and 0.25 percent.
Loans to Financial Institutions			
Primary and Secondary Credit Programs	39	Unknown	Through the primary and secondary credit programs, the Federal Reserve disburses short-term loans to banks and other institutions that are legally allowed to accept monetary deposits from consumers. The term of the loan may be as long as 90 days.
Term Auction Facility	234	400	The Term Auction Facility (TAF) allows banks and other financial institutions to pledge collateral in exchange for a loan from the Federal Reserve. The interest rate on the loan is determined by auction; such auctions are conducted biweekly for loans with a maturity of either 28 or 84 days. The maximum size of each auction is $100 billion, although accepted bids for most recent auctions have been considerably smaller.
Acquisition of Bear Stearns by J.P. Morgan Chase Backed assets to facilitate takeover of Bear Stearns by J.P. Morgan Chase	29	29	The Federal Reserve created Maiden Lane, a limited liability company (LLC), to acquire certain assets of Bear Stearns at a cost of $29 billion. (An LLC offers protection from personal liability for business debts, just like a corporation. The profits and losses of the business pass through to its owners, as they would if the business was a partnership or sole proprietorship.) The LLC will manage those assets to maximize the likelihood that the investment is repaid and to minimize disruption to financial markets. The current value of the portfolio on the Federal Reserve's balance sheet is $26 billion.

Continued

Table B-1. **Continued**

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of August 12, 2009

(Billions of dollars)

Action	Funding: Disbursed	Funding: Potential[a]	Description
Support for AIG	78	104	The Federal Reserve agreed to loan American International Group $60 billion. In addition, the Federal Reserve Bank of New York bought $19.5 billion of residential mortgage-backed securities from AIG's portfolio through an LLC and another $24.5 billion of collateralized debt obligations (CDOs) on which AIG wrote contracts for credit default swaps through another LLC. (CDOs are complex financial instruments that repackage assets such as mortgage bonds, loans for leveraged buyouts, and other debt—including other CDOs—into new securities. A credit default swap is a type of insurance arrangement in which the buyer pays a premium at periodic intervals in exchange for a contingent payment in the event that a third party defaults. The size of the premium paid relative to the contingent payment generally increases with the likelihood of default.)
Support for Short-Term Corporate Borrowing Commercial Paper Funding Facility	58	Unknown	The Commercial Paper Funding Facility (CPFF) finances the purchase of commercial paper (securities sold by large banks and corporations to obtain funding to meet short-term borrowing needs, such as payroll) directly from eligible issuers. Securities purchased under this program may be backed by assets or unsecured; they must be highly rated, denominated in U.S. dollars, and have a maturity of three months. The program is in effect through February 1, 2010.
Support for Money Market Mutual Funds			
Money Market Investor Funding Facility	0	Unknown	The Money Market Investor Funding Facility (MMIFF) is designed to restore liquidity to money markets by purchasing certificates of deposit, bank notes, and commercial paper from money market mutual funds and other similar investors. The authority to purchase assets is in effect through October 30, 2009.

Continued

Table B-1. **Continued**

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of August 12, 2009

(Billions of dollars)

Action	Funding: Disbursed	Funding: Potential[a]	Description
Support for Money Market Mutual Funds (Continued)			
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility	*	Unknown	The Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF) provides funding to U.S. depository institutions and bank holding companies to finance their purchases of high-quality asset-backed commercial paper (ABCP) from money market mutual funds under certain conditions. The program is intended to assist money market funds that hold such paper in meeting demands for redemptions by investors and to foster liquidity in the ABCP market specifically and money markets generally. The program is in effect through February 1, 2010.
Support for Primary Dealers			
Term Securities Lending Facility and TSLF Options Program	3	75	The Term Securities Lending Facility (TSLF) offers to lend Treasury securities held by the Federal Reserve for a one-month term in exchange for other types of securities held by the 18 financial institutions, known as primary dealers, that trade directly with the Federal Reserve. The TSLF Options Program (TOP), which has been suspended, offered options on short-term TSLF loans that were to be made on a future date. (An option is a contract written by a seller that conveys to the buyer the right—but not the obligation—to buy or sell a particular asset.)
Primary Dealer Credit Facility	0	Unknown	The Primary Dealer Credit Facility (PDCF) provides overnight loans in exchange for eligible collateral to financial institutions that trade directly with the Federal Reserve. The program is in effect through February 1, 2010.
Support for the Mortgage Market			
Purchases of the debt of housing-related government-sponsored enterprises	110	200	The Federal Reserve will purchase up to $200 billion in debt issued by three government-sponsored enterprises (GSEs)—Fannie Mae, Freddie Mac, and the Federal Home Loan Banks—through competitive auctions over the next several quarters.

Continued

Table B-1. **Continued**

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of August 12, 2009

(Billions of dollars)

Action	Funding: Disbursed	Funding: Potential[a]	Description
Support for the Mortgage Market (Continued)			
Purchases of mortgage-backed securities	543	1,250	Over the next several quarters, the Federal Reserve will purchase up to a total of $1,250 billion in mortgage-backed securities (MBSs) issued by GSEs and the Government National Mortgage Association (Ginnie Mae).
Support for Credit Markets	253	300	The Federal Reserve will purchase up to $300 billion of longer-term Treasury securities over a seven-month period ending this fall.
Support for Consumer and Small Business Lending Term Asset-Backed Securities Loan Facility	30	200	Through the Term Asset-Backed Securities Loan Facility (TALF), the Federal Reserve Bank of New York will lend up to $200 billion to holders of certain AAA-rated asset-backed securities collateralized by a range of loans to consumers and small businesses, and the Troubled Asset Relief Program will provide $20 billion of credit protection (protection against debtors that do not pay because of insolvency or protracted default) for those loans. The TALF began lending in March 2009; the authority to extend the different types of loans expires during the first half of 2010.
Currency Swaps with Selected Foreign Banks	75	Unknown	In response to strong demand for dollars from abroad, the Federal Reserve has contracted with 14 foreign central banks to make U.S. dollars available temporarily. After a specified period of time, the original amounts of dollars will be returned in exchange for the foreign currency.
Assistance to Citigroup	0	220	The Federal Reserve has agreed to absorb 90 percent of any losses resulting from the federal government's guarantee of a pool of Citigroup's assets after payouts have been made by Citigroup, the Troubled Asset Relief Program, and the Federal Deposit Insurance Corporation.
Assistance to Bank of America	0	87	The Federal Reserve has agreed to absorb 90 percent of any losses resulting from the federal government's guarantee of a pool of Bank of America's assets after payouts have been made by Bank of America, the Troubled Asset Relief Program, and the Federal Deposit Insurance Corporation.

Source: Congressional Budget Office based on information from the Federal Reserve.

Note: n.a. = not applicable; * = less than $500 million.

a. "Potential funding" refers to the size of the market or the maximum amount of lending under the program.

Table B-2.

Actions Taken by the Treasury in Support of the Housing and Financial Markets as of July 31, 2009

(Billions of dollars)

Action	Disbursements: Current	Disbursements: Potential[a]	Subsidy[b] (Credit basis)	Description
Troubled Asset Relief Program	292	699	90	The Emergency Economic Stabilization Act of 2008 (Division A of P.L. 110-343) granted authority to the Treasury to purchase $700 billion in assets through a new program, the Troubled Asset Relief Program (TARP).[c] To date, the program's outstanding disbursements total $292 billion. The subsidy cost estimated by the Congressional Budget Office (CBO)—about $90 billion to date—is computed using the modified credit reform procedure (that is, accounting for market risk) specified in P.L. 110-343.
Housing-Related Tax Provisions	8	Unlimited	n.a.	The Housing and Economic Recovery Act of 2008 (P.L. 110-289) authorized a refundable tax credit for first-time home buyers (to be repaid, without interest, over a 15-year period) and contained other housing-related tax provisions. The American Recovery and Reinvestment Act of 2009 modified the refundable tax credit for first-time home buyers by extending the qualifying purchase period through November 30, 2009. In addition, for homes purchased after December 31, 2008, it raised the amount of the credit to $8,000 (from $7,500) and waived the repayment requirement.
Purchases of Obligations and Securities Issued by Fannie Mae and Freddie Mac	178	Unlimited	-5	The Housing and Economic Recovery Act of 2008 authorized the Department of the Treasury to buy obligations and securities issued by Fannie Mae and Freddie Mac. About $178 billion of residential mortgage-backed securities (securities whose value is derived from an underlying pool of mortgages) had been purchased as of July 29, 2009. Authority to make such market purchases expires on December 31, 2009. The subsidy cost recorded in the budget is computed using standard credit reform procedures.

Continued

Table B-2. Continued

Actions Taken by the Treasury in Support of the Housing and Financial Markets as of July 31, 2009

(Billions of dollars)

Action	Disbursements: Current	Disbursements: Potential[a]	Subsidy[b] (Credit basis)	Description
Conservatorship for Fannie Mae and Freddie Mac	85	400	n.a.	The Treasury received senior preferred equity shares and warrants in exchange for any future contributions necessary to keep the two entities solvent. (Preferred equity shares provide a specific dividend to be paid before any dividends are paid to common stockholders and take precedence over common stock in the event of a liquidation; a warrant is a security that entitles the holder to buy stock of the company that issued it at a specified price.) CBO views Treasury cash disbursements to Fannie Mae and Freddie Mac as intragovernmental transfers; CBO estimates that including the GSEs' operations in the budget would increase the federal deficit by $291 billion in 2009.
Temporary Guarantee Program for Money Market Funds	0	2,470	n.a.	The Treasury will guarantee investors' shares as of September 19, 2008. The guarantee is in effect through September 18, 2009. Participating funds pay a fee of 1.5 or 2.3 basis points times the number of shares outstanding. (A basis point is one-hundredth of a percentage point.)[d]
Supplementary Financing Program	200	Unlimited	n.a.	The Treasury is borrowing from the public to assist the Federal Reserve.

Source: Congressional Budget Office based on information from the Department of the Treasury.

Note: n.a. = not applicable.

a. "Potential disbursements" refers to the maximum amount of spending under the program or the maximum amount of outstanding assets available for guarantee.

b. "Subsidy," broadly speaking, refers to the purchase cost minus the present value of any estimated future earnings from holding those assets and the proceeds from the eventual sale of them.

c. In June 2009, the Congressional Budget Office published *The Troubled Asset Relief Program: Report on Transactions Through June 17, 2009*, which provided an update on purchases and repayments made under that program's authority.

d. The Treasury entered into a separate agreement with one of the funds participating in the program—the Reserve Fund's U.S. Government Fund—to assist with its liquidation. Under the terms of that agreement, the Treasury's Exchange Stabilization Fund purchased the Reserve Fund's remaining securities at an amortized cost of $4 billion. Because that purchase occurred under the terms of a separate agreement, its cost is not attributed to the Temporary Guarantee Program for Money Market Funds but instead is recorded as an outlay by the Exchange Stabilization Fund.

Table B-3.

Actions Taken by Other Agencies in Support of the Housing and Financial Markets as of July 31, 2009

(Billions of dollars)

Action	Disbursements To Date	Disbursements Potential[a]	Description
			Federal Deposit Insurance Corporation
Temporarily Raised the Basic Limit on Insurance Coverage from $100,000 to $250,000 per Depositor	n.a.	700	The Helping Families Save Their Homes Act of 2009 (Public Law 111-22) temporarily raised the limit on deposit insurance through December 31, 2013. That action is estimated to increase the amount of insured deposits by about $700 billion, or 15 percent.
Temporary Liquidity Guarantee Program	n.a.	1,450	The Temporary Liquidity Guarantee Program has two components. The first—the debt guarantee program—aims to enable participating institutions to borrow and lend money more readily. It fully protects certain newly issued senior unsecured debt (securities that are not backed by collateral and have priority over all other debt in ranking for payment in the event of default) with a maturity of more than 30 days, including promissory notes, commercial paper (securities sold by large banks and corporations to meet short-term needs, such as payroll), and interbank funding. The guarantee applies to debt that is issued by October 31, 2009, and matures no later than December 31, 2012. Participating institutions pay fees based on the maturity of the debt. To date, the Federal Deposit Insurance Corporation (FDIC) has guaranteed $339 billion of new debt; potential guarantees could total $1 trillion. The second component provides full guarantees for certain checking and other non-interest-bearing accounts through December 31, 2009. Participating institutions also pay fees for this guarantee. To date, the FDIC has guaranteed $700 billion under the program.
Assistance to Citigroup	0	10	The FDIC may absorb up to $10 billion in losses resulting from the federal government's guarantee of a pool of Citigroup's assets after payouts have been made by Citigroup and the Troubled Asset Relief Program. As a fee for the guarantee, the FDIC has received $3 billion in preferred stock (shares of equity that provide a specific dividend to be paid before any dividends are paid to common stockholders and that take precedence over common stock in the event of a liquidation).

Continued

Table B-3. **Continued**

Actions Taken by Other Agencies in Support of the Housing and Financial Markets as of July 31, 2009

(Billions of dollars)

Action	Disbursements To Date	Disbursements Potential[a]	Description
Department of Housing and Urban Development			
Redevelopment of Abandoned and Foreclosed Homes	*	6	The Housing and Economic Recovery Act of 2008 (P.L. 110-289) provided $4 billion in funding to state and local governments to purchase and rehabilitate foreclosed and abandoned homes. The American Recovery and Reinvestment Act of 2009 (P.L. 111-5) provided an additional $2 billion (through the Community Development Fund) for the program.
HOPE for Homeowners Program	*	1	The HOPE for Homeowners program permits home mortgages to be refinanced through private lenders with a guarantee from the Federal Housing Administration (FHA). The new loans must have a loan-to-value ratio that is no greater than 90 percent of the property's appraised value (or such higher percentage as the Department of Housing and Urban Development determines).
FHA Secure	n.a.	1	FHA Secure was a temporary initiative to permit lenders to refinance non-FHA adjustable-rate mortgages. The program, which began in the fall of 2007, made about 4,000 loans and expired on December 31, 2008.
Federal Housing Finance Agency			
Conservatorship for Fannie Mae and Freddie Mac	n.a.	n.a.	The Federal Housing Finance Agency and the Treasury took control of these two government-sponsored enterprises (GSEs) on September 6, 2008. Under the current circumstances, the Congressional Budget Office (CBO) views Fannie Mae and Freddie Mac as governmental entities.
National Credit Union Administration			
Credit Union System Investment Program and the Homeowners Affordability Relief Program	8	8	These two loan programs are intended to aid corporate credit unions (which primarily provide financial resources and services to other credit unions). They are operated through the National Credit Union Administration's (NCUA's) Central Liquidity Facility (CLF) and are financed by borrowing from the Federal Financing Bank. The programs loaned funds to credit unions to invest in notes issued by corporate credit unions through June 30, 2009. The notes are guaranteed through June 30, 2017, by NCUA's Temporary Corporate Liquidity Guarantee Program.

Continued

Table B-3. **Continued**

Actions Taken by Other Agencies in Support of the Housing and Financial Markets as of July 31, 2009

(Billions of dollars)

Action	Disbursements: To Date	Disbursements: Potential[a]	Description
National Credit Union Administration (Continued)			
Liquidity Advances to Corporate Credit Unions and the National Credit Union Share Guarantee	10	Unknown	To mitigate losses on securities held by corporate credit unions, the NCUA implemented two special measures. First, the National Credit Union Share Insurance Fund borrowed from the CLF to provide liquidity to the two largest corporate credit unions. The NCUA also created the National Credit Union Share Guarantee, which provides a guarantee of all shares held at most corporate credit unions through September 30, 2011.
Multiple Agencies			
Making Home Affordable Plan[b]	Unknown	75	The plan seeks to provide aid to homeowners through two programs. The Home Affordable Modification Program (HAMP) helps lower the monthly mortgage payments of eligible borrowers by providing incentives to servicers and borrowers to modify the terms of their mortgages. More than 235,000 trial modifications had started by the end of July. The program expires on December 31, 2012. The Home Affordable Refinance Program (HARP) enables homeowners whose loans are guaranteed by Fannie Mae or Freddie Mac to refinance their mortgage balance up to 125 percent of the current value of their home. About 190,000 loans have been refinanced through the program since it began in April. It expires on June 10, 2010. In total, the Administration has committed $75 billion to the plan. Of that amount, $50 billion is from the Troubled Asset Relief Program, and the remainder is from other federal entities, including the GSEs and the Department of Housing and Urban Development.

Source: Congressional Budget Office based on information from the Federal Deposit Insurance Corporation, the Department of Housing and Urban Development, the Federal Housing Finance Agency, and the National Credit Union Administration.

Note: n.a. = not applicable; * = less than $500 million.

a. "Potential disbursements" refers to the maximum amount of spending under the program or the maximum amount of outstanding assets available for guarantee.

b. The Making Home Affordable plan replaced the Streamlined Modification Program, which was launched on December 15, 2008, and ended in April 2009.

APPENDIX

C

Contributors to the Revenue and Spending Projections

The following Congressional Budget Office analysts prepared the revenue and spending projections in this report:

Revenue Projections

Mark Booth	Unit Chief
David Weiner	Unit Chief
Paul Burnham	Retirement income
Grant Driessen	Excise taxes
Barbara Edwards	Social insurance taxes, Federal Reserve System earnings
Zachary Epstein	Customs duties, miscellaneous receipts
Jennifer Gravelle	Depreciation
Pamela Greene	Corporate income taxes, estate and gift taxes
Ed Harris	Individual income taxes
Athiphat Muthitacharoen	Estate tax modeling
Larry Ozanne	Capital gains realizations
Kevin Perese	Tax modeling
Kristy Piccinini	Capital gains realizations
Kurt Seibert	Earned income tax credit, depreciation
Joshua Shakin	Individual income taxes

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Sarah Jennings	Unit Chief
John Chin	International development and security, international financial institutions
Kent Christensen	Defense projections, working capital funds, procurement, scorekeeping
Sunita D'Monte	International affairs, veterans' health care, information exchange
Raymond Hall	Defense (research and development, stockpile sales, atomic energy)

Defense, International Affairs, and Veterans' Affairs (Continued)

David Newman	Defense (military construction and family housing, military activities in Iraq and Afghanistan), veterans' housing
Dawn Sauter Regan	Defense (military personnel)
Matthew Schmit	Military retirement, military health care
Jason Wheelock	Defense (other programs, operations and maintenance, radiation exposure compensation, energy employees' occupational illness compensation)
Camille Woodland	Veterans' readjustment benefits, reservists' educational benefits
Dwayne Wright	Veterans' compensation and pensions

Health Systems and Medicare

Thomas Bradley	Unit Chief
Stephanie Cameron	Medicare, Public Health Service
Mindy Cohen	Medicare
April Grady	Medicare
Jean Hearne	Medicare
Lori Housman	Medicare
Jamease Kowalczyk	Medicare, Public Health Service
Julie Lee	Medicare
Lara Robillard	Medicare

Income Security and Education

Sam Papenfuss	Unit Chief
Christina Hawley Anthony	Unemployment insurance, training programs, Administration on Aging, Smithsonian, arts and humanities, report coordinator
Chad Chirico	Housing assistance, Fannie Mae and Freddie Mac, Troubled Asset Relief Program
Sheila Dacey	Old-Age and Survivors Insurance, Social Security trust funds, Pension Benefit Guaranty Corporation
Kathleen FitzGerald	Supplemental Nutrition Assistance Program (formerly Food Stamps) and other nutrition programs
Justin Humphrey	Elementary and secondary education, Pell grants, student loans
Deborah Kalcevic	Student loans, higher education
Jonathan Morancy	Child Support Enforcement, Temporary Assistance for Needy Families, foster care, Social Services Block Grant program, child care programs, child and family services
David Rafferty	Disability Insurance, Supplemental Security Income

Low-Income Health Programs and Prescription Drugs

Kate Massey	Unit Chief
Julia Christensen	Food and Drug Administration, prescription drug issues
Sean Dunbar	Medicaid, Children's Health Insurance Program, Public Health Service
Kirstin Nelson	Medicaid, Federal Employees Health Benefits program, Public Health Service
Andrea Noda	Medicare Part D, Medicaid prescription drug policy, Public Health Service
Lisa Ramirez-Branum	Medicaid
Robert Stewart	Medicaid, Children's Health Insurance Program, Indian Health Service
Ellen Werble	Food and Drug Administration, prescription drug issues, Public Health Service
Rebecca Yip	Medicare Part D, Medicaid prescription drug policy

Natural and Physical Resources

Kim Cawley	Unit Chief
Leigh Angres	Bureau of Indian Affairs, justice, deposit insurance
Megan Carroll	Energy, air transportation
Mark Grabowicz	Justice, Postal Service
Kathleen Gramp	Deposit insurance, energy, Outer Continental Shelf receipts, spectrum auction receipts
Gregory Hitz	Agriculture
Daniel Hoople	Community and regional development, Federal Emergency Management Agency
David Hull	Agriculture
Jeff LaFave	Science and space exploration, conservation and land management, other natural resources
James Langley	Agriculture
Susanne Mehlman	Pollution control and abatement, Federal Housing Administration and other housing credit programs
Matthew Pickford	General government
Sarah Puro	Highways, Amtrak
Deborah Reis	Recreation, water transportation, legislative branch, conservation and land management
Aurora Swanson	Water resources, Fannie Mae and Freddie Mac
Susan Willie	Mass transit, commerce, Small Business Administration, Universal Service Fund

Other

Janet Airis	Unit Chief, Scorekeeping; legislative branch appropriation bill
Jeffrey Holland	Unit Chief, Projections
Shane Beaulieu	Maintenance and enhancement of the BADS system and other technical support
Edward Blau	Authorization bills
Barry Blom	Federal pay, monthly Treasury data, report coordinator
Jared Brewster	Interest on the public debt, national income and product accounts, other retirement, report coordinator
Joanna Capps	Appropriation bills (Interior and the environment, Labor–Health and Human Services)
Mary Froehlich	Computer support
Wendy Kiska	Troubled Asset Relief Program
Amber Marcellino	Federal civilian retirement, other interest, report coordinator
Joseph Mattey	Deposit insurance
Pinki Mishra	Troubled Asset Relief Program, report coordinator
Damien Moore	Fannie Mae and Freddie Mac, deposit insurance
Virginia Myers	Appropriation bills (Commerce–Justice, financial services, general government)
Jennifer Reynolds	Appropriation bills (Agriculture, foreign relations)
Mark Sanford	Appropriation bills (Defense, Homeland Security)
Esther Steinbock	Appropriation bills (Transportation–Housing and Urban Development, military construction and veterans' affairs, energy and water)
Santiago Vallinas	Other retirement, baseline coordinator
Patrice Watson	Database system administrator