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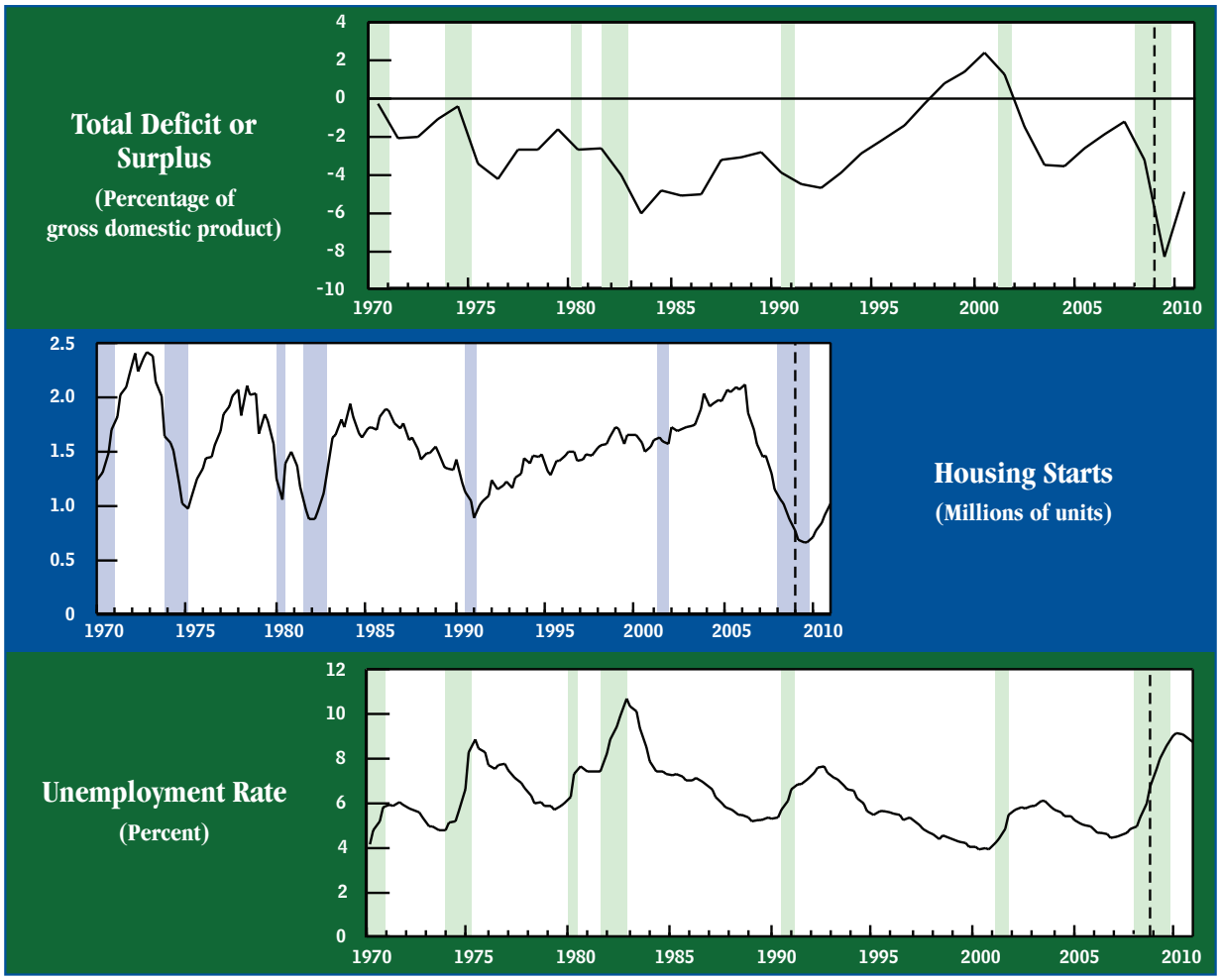
CONGRESSIONAL BUDGET OFFICE

The Budget and Economic Outlook: Fiscal Years 2009 to 2019



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The Budget and Economic Outlook: Fiscal Years 2009 to 2019

January 2009

The Congress of the United States ■ Congressional Budget Office

Notes

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

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

The figures on the cover and many of those in the text use dashed vertical lines to separate actual from projected data and use shaded vertical bars to indicate periods of recession. (A recession extends from the peak of a business cycle to its trough.) The shading for the current recession assumes that the trough will occur in the third quarter of 2009.

Supplemental data for this analysis, including some tables that customarily appear in the Congressional Budget Office's January *Outlook* but are not in this shorter version, are available on the agency'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. Because economic and budgetary circumstances have changed significantly in recent months, this report is being released several weeks earlier than usual to aid the new Congress in its deliberations. In accordance with CBO's mandate to provide impartial analysis, the report makes no recommendations.

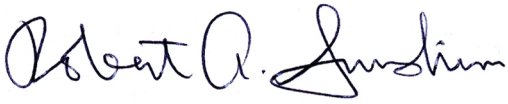
The baseline spending projections were prepared by the staff of CBO's Budget Analysis Division under the supervision of Peter Fontaine, Keith Fontenot, Theresa Gullo, Janet Airis, Tom Bradley, Kim Cawley, Jeffrey Holland, Sarah Jennings, Kate Massey, and Sam Papenfuss. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Thomas Woodward, 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.)

The economic outlook was prepared by the Macroeconomic Analysis Division under the direction of Robert Dennis, Kim Kowalewski, and John F. Peterson. Robert Arnold and Christopher Williams developed the economic forecast and projections. David Brauer, Juan Contreras, Naomi Griffin, Juann Hung, Wendy Kiska, Mark Lasky, Angelo Mascaro, Damien Moore, Benjamin Page, Frank Russek, David Torregrosa, and Steven Weinberg contributed to the analysis. Holly Battelle and Eric Miller provided research assistance.

CBO's Panel of Economic Advisers commented on an early version of the economic forecast underlying this report. At that time, members of the panel were Martin Baily, Richard Berner, Jared Bernstein, Michael Boskin, Douglas W. Elmendorf, Martin Feldstein, Robert J. Gordon, Robert E. Hall, Lawrence Katz, Allan H. Meltzer, 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. John Geanakoplos, Christopher Mayer, Chad Stone, Phillip Swagel, and Luigi Zingales 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, Mark Booth, Juan Contreras, and Jeffrey Holland authored the report, which was prepared under an exceedingly tight schedule over a holiday period. Jeffrey Holland and Eric Schatten compiled Appendix A; and Eric Miller, Appendix B.

John Skeen and Sherry Snyder edited the report. Denise Jordan-Williams and Linda Lewis Harris 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 distribution. Simone Thomas prepared the electronic version for CBO's Web site: www.cbo.gov.



Robert A. Sunshine
Acting Director

January 2009

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The Budget and Economic Outlook: Fiscal Years 2009 to 2019

The sharp downturn in housing markets across the country, which undermined the solvency of major financial institutions and severely disrupted the functioning of financial markets, has led the United States into a recession that will probably be the longest and the deepest since World War II. The Congressional Budget Office (CBO) anticipates that the recession—which began about a year ago—will last well into 2009.

Under an assumption that current laws and policies regarding federal spending and taxation remain the same, CBO forecasts the following:

- A marked contraction in the U.S. economy in calendar year 2009, with real (inflation-adjusted) gross domestic product (GDP) falling by 2.2 percent.
- A slow recovery in 2010, with real GDP growing by only 1.5 percent.
- An unemployment rate that will exceed 9 percent early in 2010.
- A continued decline in inflation, both because energy prices have been falling and because inflation excluding energy and food prices—the core rate—tends to ease during and immediately after a recession; for 2009, CBO anticipates that inflation, as measured by the consumer price index for all urban consumers (CPI-U), will be only 0.1 percent.
- A drop in the national average price of a home, as measured by the Federal Housing Finance Agency's purchase-only index, of an additional 14 percent between the third quarter of 2008 and the second quarter of 2010; the imbalance between the supply of and demand for housing persists, as reflected in unusually high vacancy rates and a low volume of housing starts.
- A decrease of more than 1 percent in real consumption in 2009, followed by moderate growth in 2010; the rise in unemployment, the loss of wealth, and tight consumer credit will continue to restrain consumption—although lower commodity prices will ease those effects somewhat.
- A financial system that remains strained, although some credit markets have started to improve; it is too early to determine whether the government's actions to date have been sufficient to put the system on a path to recovery.

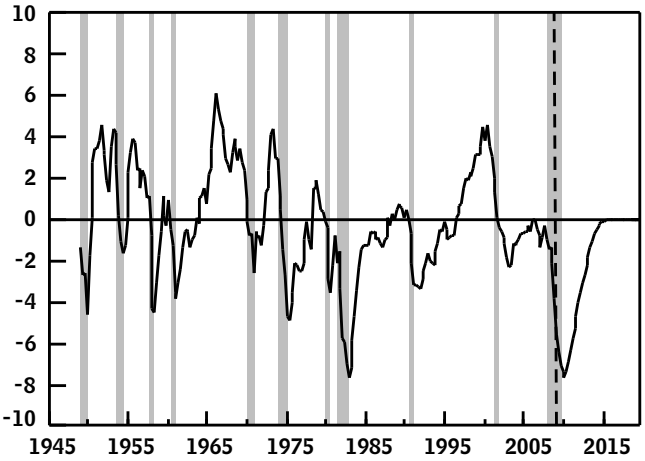
The major slowdown in economic activity and the policy responses to the turmoil in the housing and financial markets have significantly affected the federal budget. As a share of the economy, the deficit for this year is anticipated to be the largest recorded since World War II. Under the rules governing CBO's budget projections—that is, an assumption that federal laws and policies regarding spending and taxation remain unchanged—the agency's baseline reflects these key points:

- CBO projects that the deficit this year will total $1.2 trillion, or 8.3 percent of GDP. Enactment of an economic stimulus package would add to that deficit. In CBO's baseline, the deficit for 2010 falls to 4.9 percent of GDP, still high by historical standards.
- CBO expects federal revenues to decline by $166 billion, or 6.6 percent, from the amount in 2008. The combination of the recession and sharp drops in the value of assets—most significantly in publicly traded stock—is expected to lead to sizable declines in receipts, especially from individual and corporate income taxes.

Figure 1.

The GDP Gap, 1949 to 2019

(Percentage of potential gross domestic product)



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

Notes: The GDP gap is the difference between real (inflation-adjusted) gross domestic product and its estimated potential level (which corresponds to a high level of resource—labor and capital—use).

Data are quarterly and are plotted through the fourth quarter of 2019.

- According to CBO's estimates, outlays this year will include more than $180 billion to reflect the present-value of the net cost of transactions under the Troubled Asset Relief Program (TARP), which was created in the fall of 2008. (Broadly speaking, that cost is the purchase price minus the present value, adjusted for market risk, of any estimated future earnings from holding purchased assets and the proceeds from the eventual sale of them.) The TARP has the authority to enter into agreements to purchase assets totaling up to $700 billion outstanding at any one time, but the net cost over time will be much less than that amount.

- The deficit for 2009 also incorporates CBO's estimate of the cost to the federal government of the recent takeover of Fannie Mae and Freddie Mac. Because those entities were created and chartered by the government, are responsible for implementing certain government policies, and are currently under the direct control of the federal government, CBO has concluded that their operations should be reflected in the federal budget. Recognizing that cost in 2009 adds about $240 billion (in discounted present-value terms) to the deficit this year.

- Economic factors have also boosted spending on programs such as those providing unemployment compensation and nutrition assistance as well as those with cost-of-living adjustments. (Such adjustments for 2009 are large because most of them are based on the growth in the consumer price index over the four quarters ending in the third quarter of 2008.)

The Economic Outlook

CBO anticipates that the current recession, which started in December 2007, will last until the second half of 2009, making it the longest recession since World War II. (The longest such recessions otherwise, the 1973–1974 and 1981–1982 recessions, both lasted 16 months. If the current recession were to continue beyond midyear, it would last at least 19 months.) It could also be the deepest recession during the postwar period: By CBO's estimates, economic output over the next two years will average 6.8 percent below its potential—that is, the level of output that would be produced if the economy's resources were fully employed (see Figure 1). This recession, however, may not result in the highest unemployment rate. That rate, in CBO's forecast, rises to 9.2 percent by early 2010 (up from a low of 4.4 percent at the end of 2006) but is still below the 10.8 percent rate seen near the end of the 1981–1982 recession.

The Near-Term Outlook

In preparing its economic forecast, CBO assumes that current laws and policies governing federal spending and taxes do not change. This forecast, therefore, does not include the effects of a possible fiscal stimulus package. On that basis, CBO anticipates that real GDP will drop by 2.2 percent in calendar year 2009, a steep decline. CBO expects the economy to begin a slow recovery in the second half of 2009 and to grow by a modest 1.5 percent in 2010 (see Table 1).

CBO expects inflation to continue to decline, both because energy prices have been falling and because inflation excluding energy and food prices—the core rate—tends to ease during and immediately after a recession. For 2009, CBO anticipates that the increase in the CPI-U will be only 0.1 percent. For 2010, CBO forecasts the CPI-U to be higher—at 1.7 percent—because energy prices are not expected to lessen inflation that year.

Table 1.

CBO's Economic Projections for Calendar Years 2009 to 2019

	Estimated	Forecast		Projected Annual Average	
	2008	2009	2010	2011-2014	2015-2019
		Year to Year (Percentage change)			
Nominal GDP (Billions of dollars)	14,304	14,241	14,591	18,211 [a]	22,500 [b]
Nominal GDP	3.6	-0.4	2.5	5.7	4.3
Real GDP	1.2	-2.2	1.5	4.0	2.4
GDP Price Index	2.4	1.8	0.9	1.6	1.9
PCE Price Index[c]	3.3	0.6	1.3	1.7	1.9
Core PCE Price Index[d]	2.2	1.5	0.9	1.7	1.9
Consumer Price Index[e]	4.1	0.1	1.7	2.1	2.2
Core Consumer Price Index[f]	2.3	1.6	1.3	2.0	2.2
		Calendar Year Average (Percent)			
Unemployment Rate	5.7	8.3	9.0	6.4	4.8
Three-Month Treasury Bill Rate	1.4	0.2	0.6	3.8	4.7
Ten-Year Treasury Note Rate	3.7	3.0	3.2	4.8	5.4
Tax Bases (Billions of dollars)					
Economic profits	1,533	1,384	1,413	1,952 [a]	2,187 [b]
Wages and salaries	6,548	6,551	6,740	8,344 [a]	10,324 [b]
Tax Bases (Percentage of GDP)					
Economic profits	10.7	9.7	9.7	10.5	10.1
Wages and salaries	45.8	46.0	46.2	45.8	45.9
		Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GDP	2.3	-0.5	3.9	5.7	4.3
Real GDP	-0.4	-1.5	3.0	4.0	2.3
GDP Price Index	2.6	1.1	0.8	1.7	1.9
PCE Price Index[c]	1.8	1.4	1.1	1.8	1.9
Core PCE Price Index[d]	2.1	1.2	0.9	1.8	1.9
Consumer Price Index[e]	2.5	0.6	1.7	2.1	2.2
Core Consumer Price Index[f]	2.1	1.5	1.3	2.1	2.2

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

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

Economic projections for each year from 2009 to 2019 appear in Appendix B.

a. Level in 2014.

b. Level in 2019.

c. The personal consumption expenditure chained price index.

d. The personal consumption expenditure chained price index excluding prices for food and energy.

e. The consumer price index for all urban consumers.

f. The consumer price index for all urban consumers excluding prices for food and energy.

The sudden decline in economic activity in the second half of last year signaled that the recession could be severe. The recession was precipitated by a drop in house prices and housing starts, which abruptly undermined the solvency of financial institutions and severely disrupted the functioning of financial markets. A sharp rise in oil prices between early 2007 and the middle of 2008 further debilitated economic activity. Those recessionary pressures were largely offset for a time by strong growth of exports and by government policies that included a significant easing of monetary policy and tax rebates during the spring and summer of 2008. By the middle of last year, the growth of output had weakened but remained, on average, about 2 percent. By the fall of last year, however, additional turmoil hit financial markets even though policymakers had provided extraordinary amounts of support to the markets in order to contain it (see Appendix A). As spending by consumers and businesses weakened, output fell at an annual rate of 0.5 percent in the third quarter and probably fell much more in the fourth quarter. The price of oil also dropped rapidly late last year; if sustained, lower oil prices will temper the decline in output.

Normally, sharp contractions in economic activity are followed by rapid rebounds, but this forecast anticipates that the recovery in 2010 will be slow for a number of reasons. Although financial conditions are expected to improve, the pace of improvement will be restrained because it will take time for financial institutions to recover from losses due to loan defaults. As a result, borrowers will continue to find the terms and availability of credit tight, which will increase the cost of capital and hold back the growth of investment and consumption, dampening economic activity for several years. Similarly, the excess supply of vacant houses is expected to suppress the typical rebound in housing construction next year. Spending also will be muted as households continue to adjust to the large declines in wealth of the past few years. Last, foreign economies will not provide an offsetting boost in demand: Although economic growth overseas remained strong during the housing collapse of 2007 and 2008, providing support to U.S. producers, those economies are now weakening and are likely to restrain the U.S. recovery in 2010.

The federal budget will provide some support to the economy in 2009 and 2010, even in the absence of any new stimulus legislation. Federal tax liabilities (and therefore revenues) fall proportionately more than incomes in recessions, and that additional drop dampens the decline in households' real after-tax spending power. In addition, spending on some programs, such as those providing unemployment insurance and the Supplemental Nutrition Assistance Program (formerly known as the Food Stamp program), automatically increases during recessions. Those recession-induced changes in the federal budget tend to smooth out economic cycles. The magnitude of those "automatic stabilizers" can be only roughly estimated, but in CBO's forecast about $250 billion of the change in the deficit (about 1.8 percent of GDP) between 2008 and 2009 appears to be attributable to them.[1]

In contrast, spending by state and local governments will only mildly ease the downturn in economic activity. In response to lower-than-expected revenues and requirements for balanced budgets, they are cutting back their spending on goods and services, and CBO's forecast assumes essentially no real growth in that spending this year. Total state and local deficits (including both the operating and the capital accounts) will increase, but the change in the total deficits will be small relative to the recession-induced change in the federal deficit.

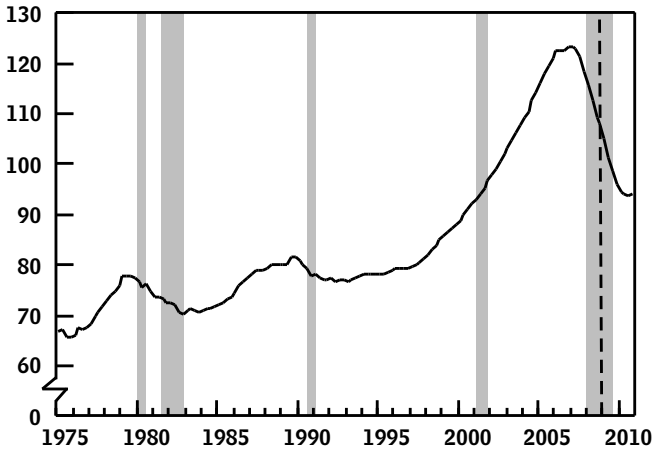
A major source of uncertainty in the outlook is the degree and persistence of turmoil in financial markets and the resulting impact on the future course of the economy. Many financial instruments and practices that contributed to the financial crisis came into widespread use only in the past decade, and the scale of the problems and the worldwide linkages of financial markets are significantly different from what they were in previous episodes of financial stress in the United States. Furthermore, the scale and novelty of federal intervention, particularly by the Federal Reserve, and uncertainty about the degree to which those interventions will affect the economic outlook, make it particularly difficult for analysts to use historical patterns to forecast the near future.

1. That calculation differs from CBO's estimate of the budgetary effects of all economic factors, primarily because it reflects only the direct effects of the business cycle, as measured by the deviation of GDP and unemployment from their potential levels. It does not include budgetary effects from changes in inflation and interest rates. See Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2008 to 2018* (January 2008), Box C-1.

Figure 2.

Inflation-Adjusted House Prices, 1975 to 2010

(Index, 2002 = 100)



Sources: Congressional Budget Office; Federal Housing Finance Agency; Department of Commerce, Bureau of Economic Analysis.

Notes: The index shown is the Federal Housing Finance Agency's purchase-only house price index for 1991 to the present and estimated values using the total index for previous years, divided by the personal consumption price index.

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

It is possible that the extensive support that the Federal Reserve and the Department of the Treasury have provided to banks and other financial institutions—and have promised to continue to provide—will soon restore a measure of confidence that will permit a rapid rebound in economic activity. Alternatively, greater declines in house prices than CBO anticipates may generate further losses on mortgage-backed securities. Because institutions' direct and indirect exposure to those securities is still not clear, banks may remain unwilling to lend to one another or to other, nonfinancial, customers, making it difficult for many households and businesses to obtain financing. Furthermore, foreign lenders, who have recently been willing to lend to the U.S. government on very advantageous terms, may become less willing to do so in the future, which would tend to raise interest rates in this country and dampen economic activity.

The Outlook from 2011 to 2019

CBO does not attempt to predict cyclical movements beyond the near term—that is, in the current projections, beyond 2010—but instead aims to describe an average path on which the economy's actual output gradually converges with its potential output.[2] In these projections, the anticipated GDP gap—the difference between actual and potential output—will not close until early 2015 (see Figure 1 on page 2). After that point, CBO projects, GDP will average close to its potential and therefore will grow at the same rate: 2.3 percent.

Inflation, as measured by the price index for personal consumption expenditures in the national income and product accounts (the inflation measure that the Federal Reserve watches most closely), averages 1.9 percent per year during the latter years of CBO's projections (2015 to 2019). That estimate implies a slightly higher growth rate, 2.2 percent, for the CPI-U and a slightly lower growth rate, 1.9 percent, for the overall GDP price index. The projected unemployment rate averages 4.8 percent during those years, equal to CBO's estimate of the average sustainable rate in the long run. The interest rate on 3-month Treasury bills is projected to average 4.7 percent, and the rate on 10-year Treasury notes, 5.4 percent.

The Housing Market

Although housing starts and house prices have fallen substantially, the inventory of unsold homes remains very high. The correction in the housing market will probably continue for most of this year.

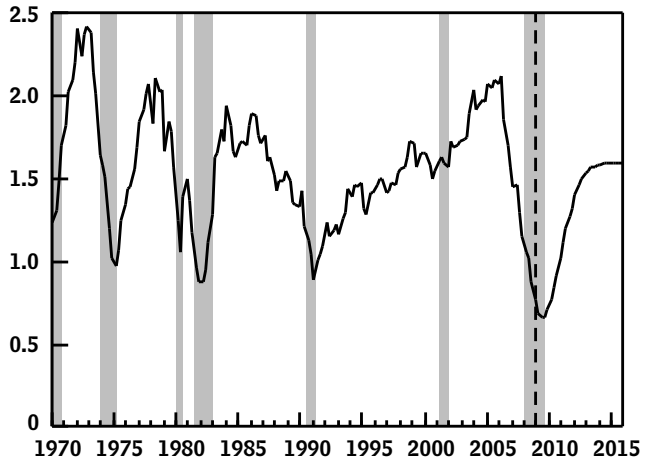
The volume of home construction started to fall early in 2006 when the number of vacant units started to increase and real prices of houses, which had been rapidly increasing, suddenly plateaued. In 2007, house prices started to fall and have continued to do so, with the worst of the decline concentrated in California, Florida, Arizona, and Nevada. According to CBO's forecast, the national average price of a house will fall by an additional 14 percent between the third quarter of 2008 and the middle of 2010. Because consumer prices are expected to grow less than 1 percent over that period, the real price of the average house falls by a similar amount (see Figure 2). Price changes in specific areas may be quite different, however.

2. A number of significant tax provisions originally enacted in 2001 and 2003 are scheduled to expire at the end of December 2010, which would affect economic growth. However, because CBO does not attempt to forecast cyclical developments more than two years ahead, it has not incorporated in its projections an estimate of the short-term restraint from the tax increase.

Figure 3.

Housing Starts, 1970 to 2015

(Millions, at an annual rate)



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

Notes: Housing starts include both single-family and multifamily homes.

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

The imbalance between the supply of and demand for housing persists, as reflected in unusually high vacancy rates and a low volume of housing starts (see Figure 3). The percentage of owned (as opposed to rented) units that were vacant and for sale jumped from a 20-year average of 1.7 percent between 1985 and 2005 to 2.8 percent in the third quarter of 2008. Largely because of that increase, housing starts dropped from an annual rate of 2.1 million in the summer of 2005 to 0.7 million at the end of 2008. CBO anticipates that housing starts will not begin to recover until late in 2009.

After rising for much of last year, mortgage rates—both for conforming loans (ones eligible to be purchased by the government-sponsored enterprises [GSEs] Fannie Mae and Freddie Mac) and larger, jumbo, loans—decreased late last year, particularly at the end of December (see Figure 4).[3] Lower mortgage rates have spurred applications for mortgage refinancing, but the number of applications for loans to finance home purchases remains low.

Foreclosure rates, however, are unusually high for all types of mortgages, particularly for subprime adjustable-rate mortgages (ARMs), putting more pressure on the financial system (see Figure 5). From early 2006 to the first half of 2008, foreclosures of properties with subprime ARMs jumped from the 2 percent average that had been experienced for eight years to 7 percent, although the percentage decreased slightly in the third quarter of 2008. Foreclosure rates are likely to remain high while house prices continue to fall and the economy remains in recession. Many homeowners have negative equity in their homes (that is, they owe more on their mortgage than the market value of their house) and will not be able to refinance their mortgage.[4]

Financial Markets

Financial markets have been under stress since August 2007, and the financial crisis deepened in the second half of 2008. In September 2008, with an ongoing decline in house prices, a slowing of real economic activity, and negative news about the state of several large financial institutions, financial markets appeared on the verge of freezing up, particularly the interbank market for short-term loans. A measure of that risk is the spread between the three-month London interbank offered rate (or Libor, the interest rate that major banks charge other banks for loans of that duration) and the three-month average of the expected federal funds rate (the Federal Reserve targets the federal funds rate in its conduct of monetary policy). That spread jumped sharply in the fall, reaching a record level of 3.6 percentage points on October 10 (see Figure 6). That increase reflected financial markets'

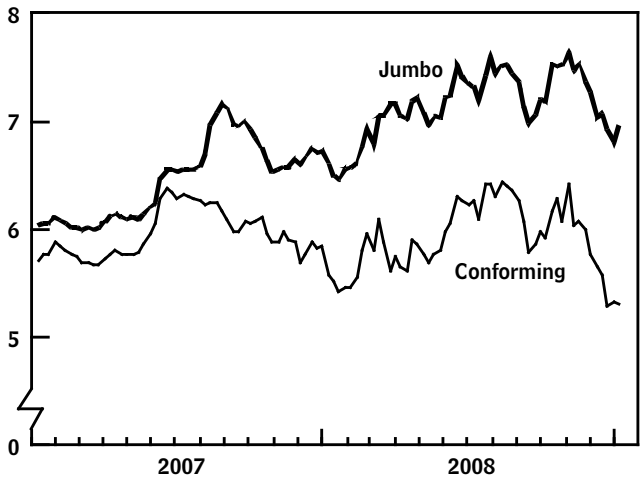
3. Those two large firms were originally created as federally chartered institutions but were privately owned and operated. Designed to facilitate the flow of investment funds to the housing market, they pool mortgages purchased from mortgage lenders and sell them as mortgage-backed securities, collecting annual guarantee fees on the mortgages they securitize. In return, Fannie Mae and Freddie Mac cover any losses that occur if the underlying mortgage loans default. The companies also hold mortgage loans in their portfolios and purchase mortgage-related securities (their own or those of other institutions), from which they earn a return.

4. Calculations of the number of households with negative equity vary from 7.8 million to 11.7 million households, amounting to a total of between $676 billion and $846 billion in outstanding loans. See Christopher Mayer and R. Glenn Hubbard, "House Prices, Interest Rates, and the Mortgage Market Meltdown" (working paper, Columbia Business School and the National Bureau of Economic Research, October 2008).

Figure 4.

Interest Rates on Mortgage Loans, January 2007 to January 2009

(Percent)



Sources: Congressional Budget Office; Bankrate.com.

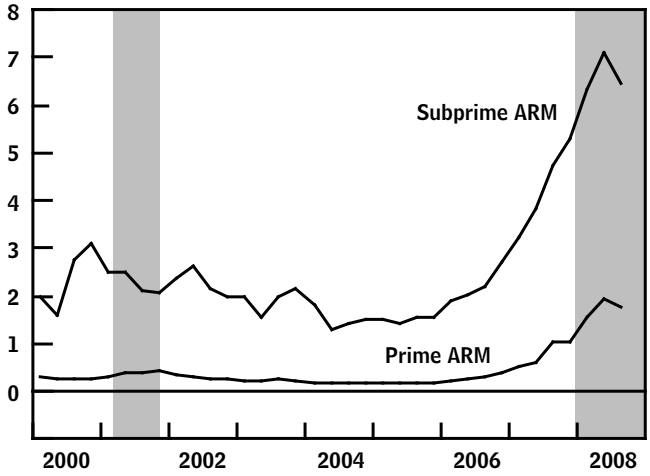
Notes: Conforming mortgage loans are those that can be purchased by Fannie Mae and Freddie Mac on the secondary loan market. Jumbo mortgage loans are all loans that are larger than conforming loans.

Data are weekly and are plotted through January 2, 2009.

Figure 5.

Foreclosure Rates, 2000 to 2008

(Percentage of loans)



Sources: Congressional Budget Office; Mortgage Bankers Association.

Notes: ARM = adjustable-rate mortgage.

Data are quarterly and are plotted through the third quarter of 2008.

greater uncertainty about the ability of banks to repay their loans.

The Federal Reserve has sought to reestablish the flow of funds in the economy, using a variety of mechanisms that, together, raised banks' reserves to $848 billion by the end of 2008 from $13 billion 12 months earlier and increased the Federal Reserve's overall balance sheet from $892 billion to $2,247 billion. The Federal Reserve cut its target for the federal funds rate from 5.25 percent in August 2007 to between zero and 0.25 percent in December and correspondingly lowered the discount rate (which is the rate that banks pay for borrowing from the Federal Reserve's discount window). However, even with short-term interest rates close to zero, the Federal Reserve has continued to provide additional support to credit markets using a strategy known as "quantitative easing." In doing so, the Federal Reserve has greatly extended its loan facilities, accepting as collateral assets that have been shunned by private lenders because of the heightened uncertainty. In addition, the Federal Reserve announced in late November plans to purchase, over the next few quarters, up to $100 billion in debt issued by Fannie Mae, Freddie Mac, and Ginnie Mae and up to $500 billion in mortgage-backed securities guaranteed by those entities.[5] As of late December, the Federal Reserve had purchased about $15 billion in debt issued by those entities.

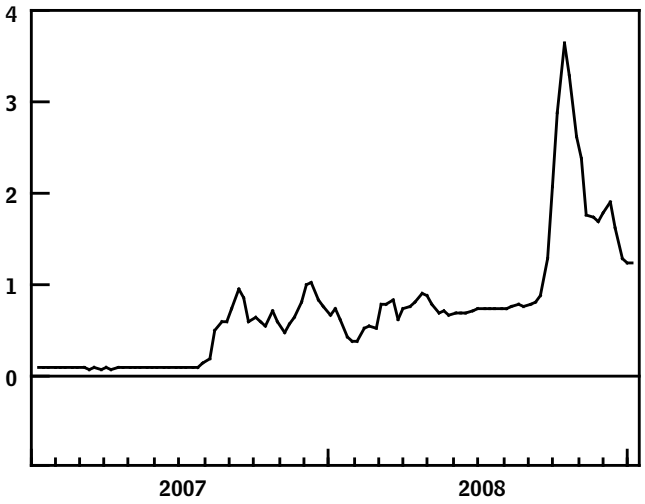
The Treasury also has intervened in the financial markets, mostly to improve the solvency of financial institutions. After failing to restore confidence in Fannie Mae and Freddie Mac with the Housing and Economic Recovery Act of 2008—which temporarily authorized the Treasury to purchase obligations and securities issued by the two entities—the government took control of them. In the fall of 2008, the Congress authorized the Troubled Asset Relief Program, which the Treasury used to provide $248 billion to financial institutions by the end of December, with the aim of helping to get credit flowing again. In addition, the Treasury will assist the automobile industry by making loans to General Motors and

5. Ginnie Mae, a government-owned corporation, guarantees securities backed by federally insured or guaranteed loans, mainly loans insured by the Federal Housing Administration or guaranteed by the Department of Veterans Affairs.

Figure 6.

The Risk Spread on Lending Between Banks, January 2007 to January 2009

(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 a three-month period as measured by the overnight index swap contract.

Data are weekly and are plotted through January 2, 2009.

Chrysler (and providing assistance to GMAC, a financial services company), with the goal of improving their long-term viability.

By the end of December 2008, some credit markets had improved, although the financial system remains strained. The spread between the Libor and the expected federal funds rate has dropped markedly from the very high levels observed in October 2008, but—at 1.2 percent—it remains unusually high. The spread between the interest rate on commercial paper, a kind of loan that plays a key role in providing short-term credit to both financial and nonfinancial businesses, and the three-month Treasury bill rate also dropped markedly in the last half of December 2008 (see Figure 7). However, in view of the high volatility of the markets in recent months, it is too early to determine whether the government's actions are having a permanent effect.

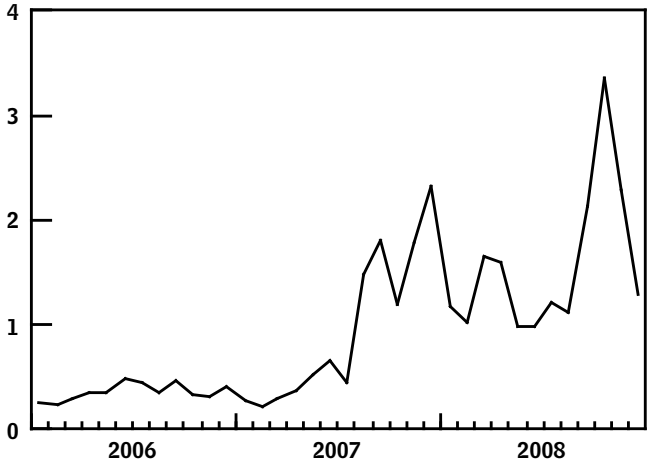
The stock market has plummeted in reaction to both the dismal news about the financial state of some firms and the downturn in economic activity. The Standard & Poor's 500 index fell by almost 45 percent from the peak in October 2007 to December 2008, and the value of stock in Fannie Mae and Freddie Mac fell almost to zero. The huge decline in equity wealth—of around $6 trillion between the end of 2007 and the end of 2008—is an important factor holding down households' spending.

The financial crisis has spread around the world. The credit squeeze has caused the governments of several industrialized countries to nationalize major banks or provide significant financial support to them. Gloomy economic outlooks have also pummeled equity markets in both industrial and emerging economies. In 2007, when emerging economies appeared to have weathered the initial stages of the crisis unfolding in industrial economies, there was hope that the relative vitality of emerging economies (such as those of China, India, and Brazil) would help moderate the downturn in the industrial world. That hope was dampened in 2008 as those economies weakened under the weight of falling exports and reversals of capital inflows. Despite bold initiatives

Figure 7.

A Risk Spread in the Commercial Paper Market, 2006 to 2008

(Percentage points)



Sources: Congressional Budget Office; Federal Reserve Board.

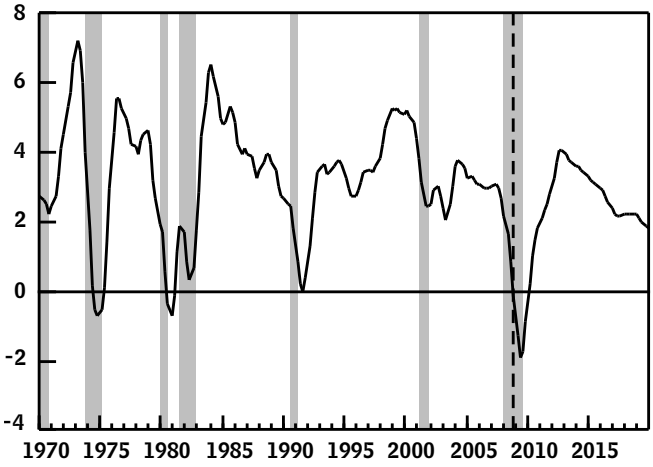
Notes: The spread is calculated as the difference between interest rates on AA asset-backed commercial paper and the three-month Treasury bill. The rate for commercial paper is that paid by the issuing institutions (primarily corporations).

Data are monthly and are plotted through December 2008.

Figure 8.

Real Personal Consumption Expenditures, 1970 to 2019

(Percentage change from previous year)



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

Note: Data are quarterly and are plotted through the fourth quarter of 2019.

announced by policymakers in industrial as well as emerging economies—for example, the large cuts in interest rates by the European Central Bank and the Bank of England and the large fiscal stimulus measure announced by the Chinese government—the outlook for the growth of economic activity worldwide is poor.

Personal Consumption Spending

Personal consumption spending sagged during the second half of last year because of three main factors: declining employment, large decreases in wealth, and tighter credit conditions (see Figure 8). Looking ahead, CBO anticipates that the rise in unemployment, lagged effects of declines in wealth, and tight consumer credit will continue to restrain consumption. Lower expenditures on petroleum imports, however, will act like a tax cut and will ease those effects somewhat (see Figure 9). CBO projects that real consumption will decrease by about 1.2 percent in 2009 and then grow moderately, by about 1.6 percent in 2010.

The looming increase in unemployment and its effect on real disposable income will severely restrict consumption growth. Employment is projected to fall by more than 2 percent in 2009 and the number of hours worked by more than 3 percent. Helped in part by falling energy prices, real disposable income is expected to grow by half a percent in 2009.

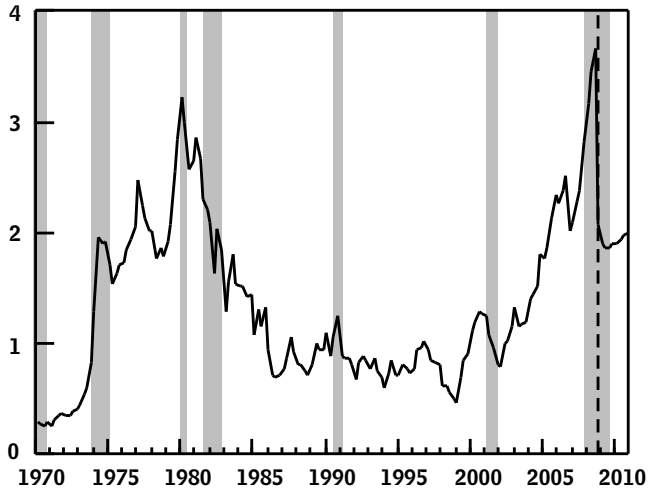
The decline in house prices and the drop in stock prices sharply reduced the net worth of households, by roughly 20 percent between the middle of 2007 and the fourth quarter of 2008. That decrease in wealth, in turn, is reducing spending on personal consumption. According to CBO's estimates, that wealth effect will subtract about 1 percentage point from the growth of personal consumption spending in 2009, after having reduced the growth of spending by almost the same amount in 2008.

The financial turmoil has also played a role in weakening households' spending by reducing the credit available to consumers, especially for those with limited borrowing opportunities or little collateral. The Federal Reserve's October 2008 survey of senior loan officers suggests that banks are not yet willing to resume extensive lending to consumers. Banks' willingness to make consumer loans has dropped to its lowest level since 1980 (see Figure 10).

Figure 9.

Petroleum Imports as a Percentage of Nominal GDP, 1970 to 2010

(Percent)



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

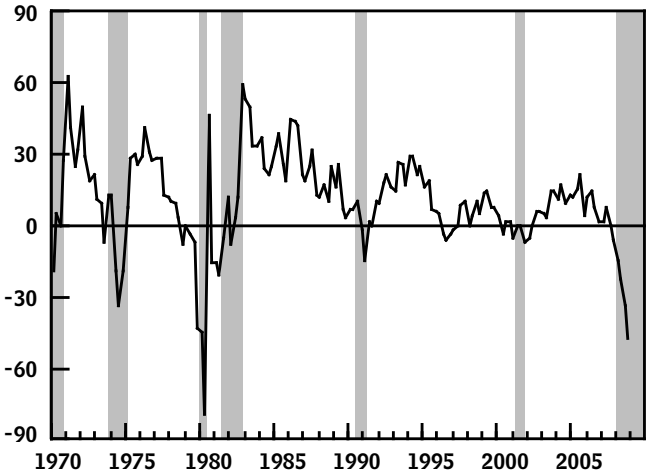
Notes: GDP = gross domestic product.

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

Figure 10.

Banks' Willingness to Lend, 1970 to 2008

(Net percentage)



Sources: Congressional Budget Office; Federal Reserve Board.

Notes: The figure shows the net percentage of respondents reporting a greater willingness to make consumer installment loans over the past three months in the Federal Reserve Board's *Senior Loan Officer Opinion Survey on Bank Lending Practices*.

Data are quarterly and are plotted through the fourth quarter of 2008.

By CBO's calculations, tight credit will subtract about 1.5 percentage points from consumption growth in 2009.

Changes in the Forecast Since the Summer of 2008

CBO has significantly changed its forecast from the one published in September 2008 (see Table 2). House prices contracted more than expected, equity prices fell, and the extent of the credit crunch in financial markets was unanticipated. The resulting loss of wealth—together with the lack of available credit—depressed consumption, employment, and GDP in the second half of 2008 by much more than CBO expected. Those developments indicated that the economic slowdown would be much more severe and more protracted than was previously anticipated. The new forecast shows lower growth of GDP, higher unemployment in subsequent years, lower commodity prices, lower investment, and lower inflation.

In the current forecast, the growth of real GDP is 3 percentage points lower in 2009 and 2 percentage points lower in 2010 than in the previous forecast. The projected average unemployment rate is 2 percentage points higher in 2009 and 3 percentage points higher in 2010. Lower commodity prices and excess productive capacity have dramatically lowered the expected growth of the CPI-U in 2009—to 0.1 percent, compared with the 3.1 percent forecast previously. The projected increase in the CPI-U in 2010 has been reduced from 2.2 percent to 1.7 percent.

CBO's projection for the growth of potential output—2.3 percent, on average, during the 10-year period—is one-tenth of a percentage point slower than what was estimated in last summer's report. Therefore, in the current forecast, by 2018, real potential GDP is about 1 percentage point lower. That downward revision is driven largely by two developments: First, the projection for business investment is considerably lower than it was in the previous forecast, which lowers the projected rate of capital accumulation and the amount of capital goods that will be available for each worker. Second, the projection for potential total factor productivity (TFP)—the growth of output that is not explained by the growth in the inputs of labor and capital—is also lower. CBO forecasts that potential TFP will grow at an average annual rate of 1.3 percent during the 2009–2019 period, compared with the 1.4 percent rate anticipated last summer.[6]

The lingering effects of the recession lower inflation and interest rates in this forecast from 2011 to 2013, and as a result, the average inflation rate and the average interest rates over the whole 2011–2019 period are slightly lower than in the summer forecast. As in the summer forecast, the inflation forecast for the period after 2014 reflects the assumption that the Federal Reserve's monetary policy will achieve an average rate of inflation, measured by the personal consumption price index, of about 2 percent during those years.

Comparison with Other Forecasts

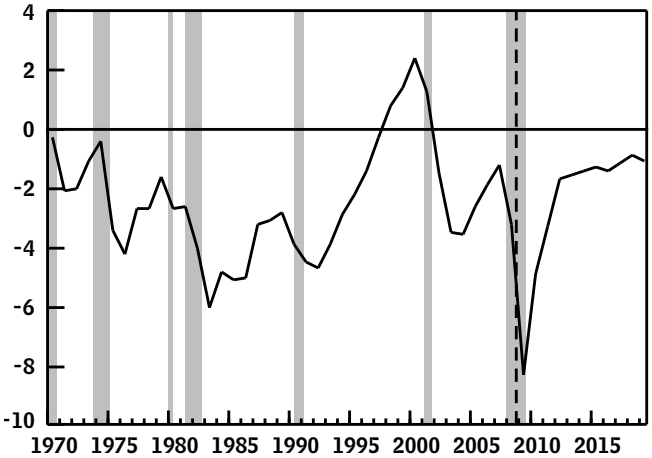
Comparing CBO's forecast with others, including the *Blue Chip* consensus (the average of about 50 forecasts by private-sector economists), is difficult because most of

6. That revision results from a reevaluation of the short-term surge in the growth of TFP earlier in the decade. CBO now treats more of that growth as transitory and therefore has lowered its estimate of the trend growth in TFP.

Figure 11.

The Total Deficit or Surplus as a Share of GDP, 1970 to 2019

(Percent)



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

Notes: GDP = gross domestic product.

Data are for fiscal years, plotted through 2019.

them incorporate an assumption of substantial additional fiscal stimulus, while CBO's (following rules specified by law) does not.[7]

In CBO's forecast, the decline of 2.2 percent in real GDP in 2009 is greater than it is in the *Blue Chip* consensus forecast and in the average of the bottom 10 forecasts, which is a decline of 1.8 percent (see Table 3 on page 14). Although some of the forecasts within the *Blue Chip* are expecting slower growth in the CPI-U in 2009, the consensus estimate of overall inflation, 0.6 percent, is higher than CBO's estimate of 0.1 percent. The *Blue Chip* consensus expects an unemployment rate of 7.8 percent next year, which is one-half percent lower than CBO's projection. CBO expects lower interest rates for 3-month Treasury bills and for 10-year Treasury notes than do the survey participants.

7. In the December survey, participants in the *Blue Chip* consensus reported that they expected fiscal stimulus of between $400 billion and $800 billion; 52 percent of the respondents expected the figure to be $500 billion.

The Budget Outlook

The ongoing turmoil in the housing and financial markets has taken a major toll on the federal budget. CBO currently projects that the deficit this year will total $1.2 trillion, or 8.3 percent of GDP. That total, however, does not include the effects of any future legislation. Enactment of an economic stimulus package, for example, would add to the 2009 deficit. In any event, as a percentage of GDP, the deficit will most likely shatter the previous post-World War II record high of 6.0 percent posted in 1983 (see Figure 11).

A drop in tax revenues and increased federal spending (much of it related to the government's actions to address the crisis in the housing and financial markets) both contribute to the robust growth in this year's deficit. Compared with receipts last year, collections from corporate income taxes are anticipated to decline by 27 percent and individual income taxes by 8 percent; in normal economic conditions, they would both grow by several percentage points. In addition, the estimated deficit includes outlays of more than $180 billion to reflect the cost of transactions of the TARP.[8]

The projected deficit for 2009 also incorporates CBO's estimate of the cost to the federal government of the recent takeover of Fannie Mae and Freddie Mac. Because those entities were created and chartered by the government, are responsible for implementing certain government policies, and are currently under the direct control of the federal government, CBO has concluded that their operations should be reflected in the federal budget. Recognizing the cost of the takeover adds about $200 billion (in discounted present-value terms) to the deficit this year, reflecting the long-term net cost of the more than $5 trillion in credit guarantees issued and loans held by those entities at the start of the fiscal year. In addition, the cost of Fannie Mae's and Freddie Mac's new credit activity in 2009 will total $38 billion, CBO estimates.

The Administration's Office of Management and Budget (OMB) will ultimately determine the budgetary treatment of Fannie Mae and Freddie Mac. If it chose to continue to treat them as nongovernmental entities, CBO would estimate the 2009 deficit to total $966 billion

8. CBO's estimate of those outlays is the projected net cost of the program's transactions on a discounted present-value basis.

Table 2.

CBO's Current and Previous Economic Projections for Calendar Years 2008 to 2018

	Estimated	Forecast		Projected Annual Average	
	2008[a]	2009	2010	2011-2014	2015-2018
Nominal GDP (Billions of dollars)					
January 2009	14,304	14,241	14,591	18,211 [b]	21,617 [c]
September 2008	14,334	14,873	15,696	19,028 [b]	22,470 [c]
Nominal GDP (Percentage change)					
January 2009	3.6	-0.4	2.5	5.7	4.4
September 2008	3.8	3.8	5.5	4.9	4.2
Real GDP (Percentage change)					
January 2009	1.2	-2.2	1.5	4.0	2.5
September 2008	1.5	1.1	3.6	3.0	2.3
GDP Price Index (Percentage change)					
January 2009	2.4	1.8	0.9	1.6	1.9
September 2008	2.3	2.6	1.9	1.9	1.9
Consumer Price Index[d] (Percentage change)					
January 2009	4.1	0.1	1.7	2.1	2.2
September 2008	4.7	3.1	2.2	2.2	2.2
Unemployment Rate (Percent)					
January 2009	5.7	8.3	9.0	6.4	4.8
September 2008	5.4	6.2	6.1	4.9	4.8
Three-Month Treasury Bill Rate (Percent)					
January 2009	1.4	0.2	0.6	3.8	4.7
September 2008	1.9	2.7	4.4	4.7	4.7

Continued

(including anticipated purchases by the Treasury of equity in those two entities).

CBO's baseline projections are not intended to be a forecast of future budgetary outcomes; rather, they serve as a neutral benchmark that legislators and others can use to assess the potential effects of policy decisions. As such, CBO's baseline budget projections, like its economic projections, do not incorporate potential changes in policy. On that basis, CBO estimates that the deficit will decline substantially in 2010—to 4.9 percent of GDP (see Table 4 on page 15). Much of that decline will result from smaller outlays for Fannie Mae, Freddie Mac, and the TARP. In addition, CBO's projections incorporate a significant increase in revenues from the alternative minimum tax (AMT), reflecting the assumption that the exemption amounts for that tax will revert to previous levels (although they have been adjusted annually for the past several years).

In CBO's baseline, the projected deficit drops further over the following two years—to 3.3 percent in 2011 and 1.6 percent in 2012. That result is largely predicated on the assumption that certain tax provisions originally enacted in 2001 and 2003 will expire in December 2010, as currently scheduled.[9] Incorporating that assumption about tax policy boosts the projected growth in revenues to more than 10 percent per year in both 2011 and 2012.

CBO projects that revenues will increase and some spending will moderate or decline as the economy gradually improves over the next few years. By the latter part of the 10-year projection period, the estimated deficits fall to about 1 percent of GDP. For the 2009–2018 period (the 10-year period used in the previous baseline), CBO

9. Those provisions were originally enacted in the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003.

Table 2. **Continued**

CBO's Current and Previous Economic Projections for Calendar Years 2008 to 2018

	Estimated 2008[a]	Forecast 2009	Forecast 2010	Projected Annual Average 2011-2014	Projected Annual Average 2015-2018
Ten-Year Treasury Note Rate (Percent)					
January 2009	3.7	3.0	3.2	4.8	5.4
September 2008	3.9	4.4	5.1	5.4	5.4
Tax Bases (Billions of dollars)					
Economic profits					
January 2009	1,533	1,384	1,413	1,952 [b]	2,139 [c]
September 2008	1,605	1,586	1,663	2,090 [b]	2,505 [c]
Wages and salaries					
January 2009	6,548	6,551	6,740	8,344 [b]	9,916 [c]
September 2008	6,616	6,882	7,286	8,727 [b]	10,238 [c]
Tax Bases (Percentage of GDP)					
Economic profits					
January 2009	10.7	9.7	9.7	10.5	10.2
September 2008	11.2	10.7	10.6	10.9	11.1
Wages and salaries					
January 2009	45.8	46.0	46.2	45.8	45.9
September 2008	46.2	46.3	46.4	45.9	45.7
Memorandum:					
Real Potential GDP (Percentage change)					
January 2009	2.6	2.4	2.0	2.2	2.4
September 2008	2.6	2.5	2.4	2.4	2.3

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

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

a. Values as of December 10, 2008.

b. Level in 2014.

c. Level in 2018.

d. The consumer price index for all urban consumers.

is now projecting deficits that total about $1.8 trillion more than those projected in September 2008; about $1.0 trillion of that change occurs in 2009 and 2010. Primarily because of the change in the economic outlook, projected revenues over the 10-year period are, on average, about $280 billion a year lower. Projected outlays are also lower, however, mostly because they extrapolate the funding provided so far this year for operations in Iraq and Afghanistan, which is nearly $120 billion lower than the total of war-related appropriations for 2008. Additional supplemental appropriations for those purposes are anticipated later in the year.

The Budget Outlook for 2009

The federal fiscal situation in 2009 will be dramatically worse than it was in 2008. Under the assumption that current laws and policies remain in place (that is, not accounting for any new legislation), CBO estimates that the deficit this year will total $1.2 trillion, more than two and a half times the size of last year's. As a percentage of

Table 3.

Comparison of Economic Forecasts by CBO and the *Blue Chip* Consensus for Calendar Year 2009

	Estimated 2008	Forecast 2009
	Year to Year (Percentage Change)	
Nominal GDP		
CBO	3.6	-0.4
Blue Chip Consensus	3.5	0.7
Blue Chip High 10	3.7	1.8
Blue Chip Low 10	3.2	-0.7
Real GDP		
CBO	1.2	-2.2
Blue Chip Consensus	1.3	-1.1
Blue Chip High 10	1.3	-0.3
Blue Chip Low 10	1.2	-1.8
GDP Price Index		
CBO	2.4	1.8
Blue Chip Consensus	2.3	1.7
Blue Chip High 10	2.4	2.5
Blue Chip Low 10	2.0	0.5
Consumer Price Index		
CBO	4.1	0.1
Blue Chip Consensus	4.0	0.6
Blue Chip High 10	4.2	1.9
Blue Chip Low 10	3.8	-0.7
	Calendar Year Average (Percent)	
Unemployment Rate		
CBO	5.7	8.3
Blue Chip Consensus	5.7	7.8
Blue Chip High 10	5.8	8.3
Blue Chip Low 10	5.7	7.4
Three-Month Treasury Bill Rate		
CBO	1.4	0.2
Blue Chip Consensus	1.4	0.7
Blue Chip High 10	1.5	1.1
Blue Chip Low 10	1.2	0.2
Ten-Year Treasury Note Rate		
CBO	3.7	3.0
Blue Chip Consensus	3.7	3.4
Blue Chip High 10	3.8	4.1
Blue Chip Low 10	3.6	2.7

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board; and Aspen Publishers, Inc., *Blue Chip Economic Indicators* (December 10, 2008).

Notes: GDP = gross domestic product.

The *Blue Chip* consensus is the average of about 50 forecasts by private-sector economists. The latest *Blue Chip* consensus does not extend past 2009.

Table 4.

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	-638	-1,340	-843	-641	-412	-413	-411	-398	-434	-393	-342	-381	-2,721	-4,668
Off-Budget Surplus[a]	183	155	140	143	149	156	162	164	162	159	154	146	749	1,534
Total Deficit	-455	-1,186	-703	-498	-264	-257	-250	-234	-272	-234	-188	-235	-1,972	-3,135
Memorandum:														
Total Deficit as a Percentage of GDP	-3.2	-8.3	-4.9	-3.3	-1.6	-1.5	-1.4	-1.2	-1.4	-1.1	-0.9	-1.1	-2.4	-1.7
Debt Held by the Public as a Percentage of GDP[b]	40.8	50.5	54.2	54.4	52.8	50.0	48.6	47.3	46.4	45.5	42.7	41.9	n.a.	n.a.
Net Subsidy Costs for Fannie Mae and Freddie Mac as Government Entities Included in Baseline Projections	0	238	20	14	8	6	3	4	4	4	4	4	52	71
Cash Infusions from the Treasury to Fannie Mae and Freddie Mac[c]	0	18	18	19	17	13	8	3	0	0	0	0	75	78
Projected Deficits If Fannie Mae and Freddie Mac Were Not Included in the Budget as Federal Entities	-455	-966	-700	-503	-272	-264	-255	-234	-268	-230	-184	-231	-1,995	-3,142

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

Notes: GDP = gross domestic product; n.a. = not applicable.

Debt issued by Fannie Mae and Freddie Mac is not included in debt held by the public.

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 two government-sponsored enterprises (GSEs) within the budget, injections of cash equity from the Treasury to the GSEs would be intragovernmental transfers.

Table 5.

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	1,060	1,199	1,396	1,572	1,726	1,853	1,978	2,099	2,227	2,347	2,475	7,745	18,870
Corporate income taxes	304	223	252	290	333	343	334	347	347	349	353	355	1,553	3,304
Social insurance taxes	900	915	938	978	1,032	1,087	1,141	1,192	1,242	1,294	1,347	1,403	5,176	11,653
Other	173	160	144	162	187	197	216	229	241	253	262	272	906	2,164
Total Revenues	**2,524**	**2,357**	**2,533**	**2,825**	**3,124**	**3,353**	**3,544**	**3,746**	**3,929**	**4,122**	**4,309**	**4,505**	**15,380**	**35,991**
On-budget	1,866	1,686	1,846	2,111	2,372	2,561	2,710	2,873	3,019	3,173	3,320	3,476	11,600	27,461
Off-budget	658	672	687	714	752	793	834	873	910	949	989	1,029	3,780	8,530
Outlays														
Mandatory spending	1,597	2,164	1,857	1,914	1,906	2,033	2,156	2,288	2,458	2,572	2,684	2,890	9,865	22,758
Discretionary spending	1,133	1,184	1,188	1,189	1,193	1,220	1,246	1,274	1,308	1,335	1,362	1,399	6,036	12,714
Net interest	249	195	191	220	289	358	392	418	434	448	452	451	1,450	3,654
Total Outlays	**2,978**	**3,543**	**3,236**	**3,323**	**3,388**	**3,610**	**3,794**	**3,980**	**4,201**	**4,355**	**4,497**	**4,740**	**17,351**	**39,126**
On-budget	2,504	3,026	2,689	2,752	2,784	2,973	3,121	3,271	3,453	3,565	3,663	3,857	14,320	32,129
Off-budget	475	517	547	571	604	637	672	709	748	790	835	883	3,031	6,997
Deficit (-) or Surplus	**-455**	**-1,186**	**-703**	**-498**	**-264**	**-257**	**-250**	**-234**	**-272**	**-234**	**-188**	**-235**	**-1,972**	**-3,135**
On-budget	-638	-1,340	-843	-641	-412	-413	-411	-398	-434	-393	-342	-381	-2,721	-4,668
Off-budget	183	155	140	143	149	156	162	164	162	159	154	146	749	1,534
Debt Held by the Public	5,803	7,193	7,829	8,238	8,475	8,516	8,734	8,925	9,149	9,335	9,127	9,344	n.a.	n.a.
Memorandum:														
Gross Domestic Product	14,224	14,257	14,452	15,137	16,048	17,035	17,986	18,864	19,703	20,537	21,397	22,278	80,659	183,438
							As a Percentage of Gross Domestic Product							
Revenues														
Individual income taxes	8.1	7.4	8.3	9.2	9.8	10.1	10.3	10.5	10.7	10.8	11.0	11.1	9.6	10.3
Corporate income taxes	2.1	1.6	1.7	1.9	2.1	2.0	1.9	1.8	1.8	1.7	1.6	1.6	1.9	1.8
Social insurance taxes	6.3	6.4	6.5	6.5	6.4	6.4	6.3	6.3	6.3	6.3	6.3	6.3	6.4	6.4
Other	1.2	1.1	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2
Total Revenues	**17.7**	**16.5**	**17.5**	**18.7**	**19.5**	**19.7**	**19.7**	**19.9**	**19.9**	**20.1**	**20.1**	**20.2**	**19.1**	**19.6**
On-budget	13.1	11.8	12.8	13.9	14.8	15.0	15.1	15.2	15.3	15.4	15.5	15.6	14.4	15.0
Off-budget	4.6	4.7	4.8	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.7	4.7
Outlays														
Mandatory spending	11.2	15.2	12.9	12.6	11.9	11.9	12.0	12.1	12.5	12.5	12.5	13.0	12.2	12.4
Discretionary spending	8.0	8.3	8.2	7.9	7.4	7.2	6.9	6.8	6.6	6.5	6.4	6.3	7.5	6.9
Net interest	1.7	1.4	1.3	1.5	1.8	2.1	2.2	2.2	2.2	2.2	2.1	2.0	1.8	2.0
Total Outlays	**20.9**	**24.9**	**22.4**	**22.0**	**21.1**	**21.2**	**21.1**	**21.1**	**21.3**	**21.2**	**21.0**	**21.3**	**21.5**	**21.3**
On-budget	17.6	21.2	18.6	18.2	17.3	17.5	17.4	17.3	17.5	17.4	17.1	17.3	17.8	17.5
Off-budget	3.3	3.6	3.8	3.8	3.8	3.7	3.7	3.8	3.8	3.8	3.9	4.0	3.8	3.8
Deficit (-) or Surplus	**-3.2**	**-8.3**	**-4.9**	**-3.3**	**-1.6**	**-1.5**	**-1.4**	**-1.2**	**-1.4**	**-1.1**	**-0.9**	**-1.1**	**-2.4**	**-1.7**
On-budget	-4.5	-9.4	-5.8	-4.2	-2.6	-2.4	-2.3	-2.1	-2.2	-1.9	-1.6	-1.7	-3.4	-2.5
Off-budget	1.3	1.1	1.0	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.9	0.8
Debt Held by the Public	40.8	50.5	54.2	54.4	52.8	50.0	48.6	47.3	46.4	45.5	42.7	41.9	n.a.	n.a.

Source: Congressional Budget Office.

Note: n.a. = not applicable.

GDP, the deficit this year will total 8.3 percent (as compared with 3.2 percent in 2008)—the largest since 1945.

The deterioration in the fiscal picture results from both increased outlays and decreased revenues. Relative to what they were last year, outlays will rise dramatically—by 19 percent according to CBO's estimates. Much of that increase is a result of policy responses to the turmoil in the housing and financial markets—particularly spending for the TARP and the conservatorship of Fannie Mae and Freddie Mac.[10] In addition, economic developments have reduced tax receipts (particularly from individual and corporate income taxes) and boosted spending on programs such as those providing unemployment compensation and nutrition assistance as well as those with cost-of-living adjustments.

Outlays. Without changes in current laws and policies, CBO estimates, outlays will rise from $3.0 trillion in 2008 to $3.5 trillion in 2009 (see Table 5). Mandatory spending is projected to grow by almost $570 billion, or by 36 percent; nearly three-quarters of that growth results from the activities of the TARP and CBO's treatment of Fannie Mae and Freddie Mac as federal entities. Discretionary spending is projected to grow by $52 billion, or by 4.6 percent. In contrast, net interest is anticipated to decline by 22 percent as a result of lower interest rates and lower inflation. In total, outlays will be equal to 24.9 percent of GDP, a level exceeded only during the later years of World War II.

CBO estimates that incorporating the two housing GSEs into the federal budget would add nearly $240 billion to outlays in 2009.[11] Most of that amount results from a one-time expense—the long-term net cost of taking on Fannie Mae's and Freddie Mac's portfolios of mortgage loans and guarantees.[12]

Assuming that the TARP eventually disburses the full $700 billion that was specified in the legislation that created the program, CBO has estimated outlays of more than $180 billion for 2009 to account for the subsidy costs related to those investments and loans.[13]

Spending for certain other mandatory programs is expected to rise sharply this year. The faltering economy has increased outlays for unemployment compensation and the Supplemental Nutrition Assistance Program. Unemployment compensation is projected to nearly double—from $43 billion last year to $79 billion this year—as a result of increased unemployment and legislation to date extending such benefits. Outlays for the nutrition assistance program are expected to grow by 27 percent—from $39 billion to $50 billion—primarily because of increases in caseloads and benefits (resulting from higher food prices).

The three largest mandatory programs—Social Security, Medicare, and Medicaid—are all anticipated to record growth of at least 8 percent this year. Some of that growth stems from the relatively high rate of inflation recorded early in 2008, which boosted cost-of-living adjustments for retirees and the cost of health care. In addition, rising unemployment will add to Medicaid spending by increasing the number of beneficiaries.

Discretionary spending under current laws and policies is projected to grow by 4.6 percent in 2009. In CBO's baseline, defense outlays rise by 5.0 percent and nondefense outlays by 4.1 percent. However, most programs are currently operating under a continuing resolution, which holds funding for 2009 at the level provided for 2008. Final appropriations and additional funding for operations in Iraq and Afghanistan may increase outlays for 2009 and beyond, and any stimulus package may raise discretionary spending further.

Even though the amount of debt held by the public is projected to grow by nearly $1.4 trillion this year (exclud-

10. 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.

11. Another housing-related GSE, the Federal Home Loan Bank System (FHLB), which provides low-cost loans to home mortgage lenders, has not been taken over by the government. However, some of the FHLB's activities, specifically those related to affordable housing, are recorded in the federal budget.

12. CBO's calculations related to Fannie Mae and Freddie Mac are done by estimating the present value of all future cash flows, including an adjustment for market risk.

13. CBO's calculation of the cost of the TARP has been done by estimating the present value of all future cash flows, including an adjustment for market risk (as specified by the Emergency Economic Stabilization Act of 2008, Division A of Public Law 110-343). Thus far, the Administration is accounting for capital purchases made under the TARP on a cash basis rather than on the present-value basis that was specified in the law. That treatment will show more outlays for the TARP this year and then substantial receipts in future years.

ing any effects of future legislation), net interest payments are projected to decline by more than 20 percent. Short-term interest rates on federal debt have plummeted to near zero in recent months, and long-term rates have fallen by 100 basis points since last summer.[14] Such low rates have substantially reduced the near-term cost of borrowing. In addition, the lower inflation forecast for the current year has reduced the projected cost of interest on the Treasury's inflation-protected securities by $35 billion relative to what it was last year.

Revenues. CBO expects federal revenues under current laws and policies to total $2.4 trillion this fiscal year, a decline of $166 billion, or 6.6 percent, from the amount in 2008. The combination of the recession and sharp drops in the value of assets—most significantly in publicly traded stock—is expected to lead to sizable declines in receipts from individual and corporate income taxes and, to a much lesser extent, from estate and gift taxes. Receipts from individual income taxes are projected to decline this year by $86 billion, or by 8 percent, and receipts from corporate income taxes by $81 billion, or by 27 percent. In CBO's baseline, an increase in social insurance (payroll) tax receipts of $14 billion, or 2 percent, offsets a small portion of the projected overall decline in revenues.

As a share of GDP, revenues are projected to decline from 17.7 percent in 2008 to 16.5 percent in 2009—about the share recorded in 2003 and 2004 but otherwise the lowest since 1959. Typically, revenues as a percentage of GDP drop in recessions, and CBO expects the decline to be especially pronounced this year as a result of the sharp fall in asset prices and in taxable corporate profits.[15]

The substantial decline in the stock market is expected to sharply reduce revenues in 2009 from a variety of sources: realizations of capital gains by individuals and corporations; distributions by individuals from their tax-deferred retirement accounts, such as 401(k)s and individual retirement accounts; and estate and gift taxes. The largest of those effects is concentrated in receipts from individual income taxes. Tax liabilities from individuals' realized capital gains are projected to drop in tax year 2008 by about $55 billion, or by more than 40 percent, mostly affecting federal receipts in 2009.

Declines in corporate capital gains represent just a portion of the expected weakness in corporate receipts. CBO expects profits of corporations to decline substantially because, as in most recessions, income from their sales and investments will drop faster than their costs of paying workers, paying interest on debt, and depreciating their equipment and structures. For tax year 2008, CBO also expects a substantial increase in tax deductions for bad debts, which include loans that businesses make that they can no longer collect. In addition, steep 2008 losses in the financial industry, which was very profitable in 2006 and 2007, mean that many firms in that sector will be able to apply those losses to the earlier profits and receive refunds of the income taxes they previously paid; those refunds will reduce receipts from corporate income taxes in 2009.[16]

Federal Debt. In most years, the amount of debt that the Treasury issues roughly equals the annual budget deficit, although a number of other factors also affect the government's need to borrow money from the public. In a typical year, those factors might total $10 billion to $30 billion. However, the Treasury's actions aimed at stabilizing the financial markets added more than $300 billion to the Treasury's borrowing needs in 2008 (on top of the borrowing necessary to finance the budget deficit) and will boost them by about an estimated $200 billion in 2009 (see Table 6).

In 2008, the Treasury borrowed about $300 billion to deposit at the Federal Reserve to help it finance initiatives to enhance liquidity in the credit markets. CBO anticipates that the Treasury will withdraw those balances later this year, thereby reducing borrowing needs for 2009 by the amount deposited last year.

14. A basis point is one-hundredth of a percentage point.

15. The projected decline in revenues for 2009 is greater when receipts are compared with those in 2008 excluding the direct effect of tax rebates sent to individuals under the Economic Stimulus Act of 2008; those rebates reduced revenues in 2008 by about 0.4 percent of GDP.

16. Under current law, firms with losses generally can receive refunds of income taxes paid in the two previous years.

Table 6.

CBO's Baseline Projections of Federal Debt

(Billions of dollars)

	Actual 2008[a]	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Debt Held by the Public at the Beginning of the Year	5,035	5,803	7,193	7,829	8,238	8,475	8,516	8,734	8,925	9,149	9,335	9,127
Changes to Debt Held by the Public												
Deficit	455	1,186	703	498	264	257	250	234	272	234	188	235
Other means of financing												
TARP[b]	0	461	-20	-91	-33	-218	-31	-31	-31	-31	-378	0
Fannie Mae and Freddie Mac[c]	0	-221	-6	-1	2	-1	-4	-10	-13	-13	-13	-14
MBS purchase program[b]	5	248	-23	-23	-23	-23	-23	-23	-23	-23	-23	-23
Change in cash balances	296	-297	-40	0	0	0	0	0	0	0	0	0
Other	12	13	23	26	27	27	26	22	20	20	19	19
Subtotal	313	204	-67	-89	-27	-215	-32	-42	-48	-48	-396	-18
Total	**768**	**1,390**	**636**	**410**	**236**	**42**	**217**	**192**	**224**	**185**	**-208**	**217**
Debt Held by the Public at the End of the Year	**5,803**	**7,193**	**7,829**	**8,238**	**8,475**	**8,516**	**8,734**	**8,925**	**9,149**	**9,335**	**9,127**	**9,344**
Debt Held by Government Accounts												
Social Security	2,366	2,524	2,668	2,814	2,964	3,119	3,281	3,445	3,607	3,766	3,919	4,065
Other[d]	1,817	1,812	1,826	1,872	1,971	2,074	2,173	2,268	2,336	2,406	2,486	2,564
Total	4,183	4,336	4,494	4,686	4,935	5,193	5,454	5,712	5,943	6,172	6,405	6,629
Gross Federal Debt	9,986	11,529	12,323	12,924	13,410	13,710	14,188	14,638	15,092	15,506	15,532	15,973
Debt Subject to Limit[e]	9,960	11,502	12,296	12,898	13,383	13,684	14,162	14,612	15,066	15,481	15,506	15,947
Memorandum:												
Debt Held by the Public at the End of the Year as a Percentage of GDP	40.8	50.5	54.2	54.4	52.8	50.0	48.6	47.3	46.4	45.5	42.7	41.9

Source: Congressional Budget Office.

Notes: TARP = Troubled Asset Relief Program; MBS = mortgage-backed security; GDP = gross domestic product.

Debt issued by Fannie Mae and Freddie Mac is not included in any of the above figures.

a. Preliminary.

b. Transactions related to the TARP and purchases of MBSs are accounted for in CBO's budget estimates using procedures similar to those used for federal credit programs. However, borrowing requirements are based on the cash flows of those programs.

c. CBO's calculations of federal borrowing requirements do not include the net subsidy costs for Fannie Mae and Freddie Mac. However, the calculations do include cash infusions from the Treasury.

d. Mainly Civil Service Retirement and Disability, Military Retirement, Medicare, and Unemployment Insurance Trust Funds.

e. Differs from the gross federal debt primarily because it excludes most debt issued by agencies other than the Treasury and the Federal Financing Bank. The current debt limit is $11,315 billion.

In the other direction, the cash flows for two programs will lift the Treasury's borrowing needs by more than $700 billion. For the TARP, CBO's baseline includes outlays of about $180 billion for 2009, but the Treasury is likely to have to borrow $460 billion more than that to cover the capital purchases, loans, and other activities of the program this year.[17] Additionally, the Treasury is purchasing mortgage-backed securities from the private market; CBO assumes that such purchases will total nearly $250 billion this year, thereby necessitating additional borrowing of a similar amount (although the budgetary impact of the purchases, shown as an estimated subsidy amount in 2009, is relatively small).

One other factor affects the gap between the projected deficit and anticipated borrowing. Although CBO is treating Fannie Mae and Freddie Mac as part of the federal budget, most of the cost recorded for 2009 reflects a present-value calculation rather than a cash outflow; consequently, the projected deficit overstates borrowing requirements in that respect by about $220 billion.

The Budget Outlook for 2010 to 2019

Under the assumptions that CBO uses for its baseline, the budget deficit would fall to about $700 billion in 2010. Revenues would increase by $176 billion that year, rebounding from declines in the previous two years. Outlays would be substantially lower than in 2009, largely because of the projected drop in outlays recorded for the TARP and for the subsidy costs related to Fannie Mae and Freddie Mac; with those two factors excluded, outlays would grow by 2.8 percent in 2010.

At 4.9 percent of GDP, the deficit in 2010 would be significantly lower than the one for this year but about twice as high as the average deficit over the past 40 years. Under current laws and policies, CBO projects, the deficit would fall to 3.3 percent of GDP in 2011, when certain tax provisions originally enacted in 2001 and 2003 are scheduled to expire, and to 1.6 percent in 2012, when the full effect of those expirations on revenues occurs. The decline in the deficit would be greater in those years but for the likelihood that interest rates will rise in conjunction with economic recovery, thereby boosting interest payments. Over the following few years, the deficits projected in CBO's baseline decline slightly from the level in 2012; by 2019, under the assumptions used for the baseline, the deficit would represent about 1.1 percent of GDP.

Outlays. Under the assumptions governing the construction of CBO's baseline, total outlays would decline from this year's level of 24.9 percent of GDP. By 2012, outlays would total 21.1 percent of GDP and would stay around that level through 2019, although they would increase by about 5 percent per year in nominal terms over that period. That increase is expected to result from higher interest costs and from the continued growth of Medicare and Medicaid at a pace significantly faster than the rate of growth of the economy. In contrast, discretionary spending is assumed to grow much more slowly—at the rate of inflation—as specified in the rules for producing baseline projections.

Net interest costs are projected to change little from 2009 to 2010, as interest rates are expected to remain relatively low. However, such costs are projected to grow rapidly over the next several years as a result of extraordinarily large accumulations of debt over the 2008–2011 period and an anticipated rise in rates beginning in 2011. Debt held by the public, which was $5.0 trillion at the end of fiscal year 2007, already exceeds $6 trillion, and under CBO's baseline projections, would grow to $8.2 trillion by the end of 2011. In the baseline, the government's interest payments grow by 16 percent in 2011, 31 percent in 2012, and 24 percent in 2013 before leveling off near the end of the 10-year projection period.

In CBO's baseline, the growth of both Medicare and Medicaid averages about 7 percent annually from 2010 through 2019. Under current law, Medicare outlays will be constrained in 2010 and subsequent years by the rate-setting system (the "sustainable growth rate") that controls the fees paid for physicians' services. Under that system, CBO projects, those fees will be reduced by about 21 percent in 2010 and by additional amounts thereafter. If legislation was enacted to override those reductions (as has happened in every year since 2003), spending on Medicare would be significantly greater than is projected in CBO's baseline. For example, if the scheduled reductions in physicians' fees were delayed one year so that payment rates in 2010 remained at the 2009 level (before dropping roughly 25 percent in 2011), outlays would increase by $12 billion in 2010 and by a total of $14 billion over the 2010–2019 projection period. Maintaining

17. CBO assumes that the TARP will also disburse about $20 billion in 2010 and that dividend payments received by the Treasury will offset some borrowing needs this year and in the future.

the 2009 payment rates through 2019 would add $324 billion in outlays over that period.

Total discretionary outlays, as projected in the baseline, grow at an average annual rate of 1.8 percent, rising from $1.2 trillion next year to $1.4 trillion in 2019. Such projections are based on the assumption that discretionary funding grows at specified rates of inflation and reflect the most recent funding provided. Relative to GDP, discretionary outlays fall from 8.2 percent in 2010 to 6.3 percent in 2019; at that point, defense outlays would, as a share of GDP, be at about the level that they were in 2001, but nondefense discretionary outlays would be lower than at any point in the past 40 years.

Revenues. After 2009, receipts are projected to begin growing again as the economy recovers and certain scheduled changes in tax law take effect. In CBO's baseline, revenues are projected to rise by 7.5 percent in 2010; over 40 percent of that growth stems from the assumed expiration of temporary relief from the AMT. For both 2011 and 2012, revenues are projected to increase by more than 10 percent; roughly half of that increase is attributable to the scheduled expiration of reductions in the individual income and estate taxes enacted in 2001 and 2003.

Under current laws and policies, revenues would grow faster than GDP in every year after 2009: They would reach 19.5 percent of GDP in 2012 and continue to rise, to 20.2 percent by 2019, the highest level since 2000. Since World War II, revenues have reached or exceeded 20.0 percent of GDP only three times—each year from 1998 to 2000.

In the baseline, most of the projected increase in revenues relative to GDP stems from individual income taxes. In addition to the effects that scheduled changes in tax law have over the 2010–2012 period, revenues from individual income taxes increase faster than GDP each year after 2009 because of three factors: the phenomenon known as real bracket creep, in which the overall growth of real income causes more income to be taxed in higher tax brackets; increases in revenues from the AMT, which will affect more taxpayers over time because it is not indexed for inflation, unlike important parts of the regular income tax; and increases in taxable distributions from tax-deferred retirement accounts as the population ages.

Federal revenues include remittances to the Treasury from the Federal Reserve, based on the latter's earnings. Until recently, those earnings consisted largely of interest on Treasury securities held for the conduct of monetary policy; the Federal Reserve paid no interest on its currency issues or the deposited reserves of banks. In response to the turmoil in the financial markets, the Federal Reserve's portfolio has expanded significantly in recent months through various loans and asset acquisitions; those assets now generate earnings for the Federal Reserve but also pose some risk of losses if the firms involved fail or if the posted collateral is insufficient to cover the losses. The Federal Reserve now pays interest on both required and excess reserves—the latter much increased as a part of the portfolio expansion—which reduces its earnings. Relative to previous projections, CBO's current estimates of the Federal Reserve's earnings are very similar for 2009 and lower for 2010 through 2018 by a total of about $90 billion. After 2009, the earnings-increasing effects of a larger portfolio will be insufficient to cover the earnings-reducing effects of lower interest rates, expected losses on the portfolio, and the payment of interest on reserves.[18]

Budget Projections Under Alternative Scenarios

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

Activities Related to Operations in Iraq and Afghanistan and the War on Terrorism. CBO's projections of discretionary spending for future years include outlays for operations in Iraq and Afghanistan and for other activities related to the war on terrorism; those outlays arise from funding provided in 2008 and prior years, from the $68 billion already provided for 2009, and from the $744 billion in budget authority for those purposes that is projected over the 2010–2019 period (under an assumption that funding each year is set at $68 billion plus adjustments for inflation). However, the funding provided for 2009 represents only a portion of what will be needed for those operations throughout this year and probably does not indicate the likely amount of spending in future years.

18. Beyond 2013, the reduction in projected revenues becomes less significant, with the remaining effect stemming largely from lower interest rates on long-term Treasury securities purchased by the Federal Reserve in the near term and held to maturity.

Table 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 Activities Related to the War on Terrorism to 30,000 by 2011[a]													
Effect on the deficit[b]	-24	-24	-1	19	30	37	41	42	45	45	47	62	281
Debt service	*	*	-1	-1	*	1	3	5	8	10	13	-2	37
Reduce the Number of Troops Deployed for Military Operations in Iraq and Afghanistan and Other Activities Related to the War on Terrorism to 75,000 by 2013[c]													
Effect on the deficit[b]	-26	-50	-63	-44	-21	-7	-1	3	6	6	6	-184	-165
Debt service	0	-1	-2	-5	-8	-10	-11	-12	-12	-13	-13	-26	-87
Increase Regular Discretionary Appropriations at the Rate of Growth of Nominal GDP[d]													
Effect on the deficit[b]	0	3	-16	-50	-91	-134	-173	-209	-241	-275	-308	-288	-1,494
Debt service	0	*	*	-1	-5	-11	-19	-30	-43	-58	-76	-18	-244
Freeze Total Discretionary Appropriations at the Level Provided for 2009													
Effect on the deficit[b]	0	14	31	51	76	103	132	162	192	222	256	275	1,240
Debt service	0	*	1	2	6	11	18	26	36	49	63	20	212
Policy Alternatives That Affect the Tax Code[e]													
Extend EGTRRA and JGTRRA[f]													
Effect on the deficit[b]	*	-3	-132	-228	-257	-269	-280	-291	-302	-313	-325	-889	-2,400
Debt service	*	*	-1	-8	-22	-37	-54	-71	-90	-110	-131	-69	-525
Extend Other Expiring Tax Provisions													
Effect on the deficit[b]	-3	-21	-35	-52	-57	-62	-65	-69	-72	-75	-80	-227	-588
Debt service	*	*	-1	-3	-6	-10	-14	-18	-22	-27	-33	-20	-133
Index the AMT for Inflation[g]													
Effect on the deficit[b]	-7	-81	-58	-31	-37	-44	-52	-62	-72	-83	-97	-251	-617
Debt service	*	-1	-2	-5	-8	-11	-15	-19	-23	-28	-34	-27	-146

Continued

Table 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[e]													
Effect on the deficit[b]	0	0	-16	-52	-59	-67	-74	-82	-88	-95	-102	-194	-635
Debt service	0	0	*	-1	-4	-8	-12	-17	-22	-28	-34	-14	-126
Total Discretionary Outlays in CBO's Baseline	1,184	1,188	1,189	1,193	1,220	1,246	1,274	1,308	1,335	1,362	1,399	6,036	12,714
Total Outlays for Operations in Iraq and Afghanistan in CBO's Baseline	144	109	84	74	73	73	74	75	77	78	80	413	797
Total Deficit in CBO's Baseline	-1,186	-703	-498	-264	-257	-250	-234	-272	-234	-188	-235	-1,972	-3,135

Sources: Congressional Budget Office; Joint Committee on Taxation.

Note: 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.

a. This alternative does not extrapolate the $68 billion in funding for military operations and associated costs in Iraq and Afghanistan provided for 2009. However, it incorporates the assumption that an additional $82 billion in budget authority will be provided in 2009 to carry out operations in those countries. Future funding for operations in Iraq, Afghanistan, or elsewhere would total $92 billion in 2010, $42 billion in 2011, and then about $32 billion a year from 2012 on—for a total of $388 billion over the 2010–2019 period.

b. Excluding debt service.

c. This alternative does not extrapolate the $68 billion in funding for military operations and associated costs in Iraq and Afghanistan provided for 2009. However, it incorporates the assumption that an additional $87 billion in budget authority will be provided in 2009 to carry out operations in those countries. Future funding for operations in Iraq, Afghanistan, or elsewhere would total $149 billion in 2010, $129 billion in 2011, $95 billion in 2012, and about $70 billion a year from 2013 on—for a total of $867 billion over the 2010–2019 period.

d. Under this alternative, appropriations for 2009 for operations in Iraq and Afghanistan (as well as other emergency appropriations) are extrapolated according to rules for the baseline.

e. When this report went to press, the Joint Committee on Taxation's (JCT's) most recent estimates of the effects of extending expiring tax provisions were based on CBO's baseline projections from February 2008, updated for laws enacted through August 2008. Therefore, CBO has adjusted those estimates to take into account its updated economic projections and recent changes in law. JCT is currently updating its estimates to reflect CBO's new projections, and CBO will make those estimates available when they are completed.

f. These estimates do not include the effects of extending the increased exemption amount or the treatment of personal credits for the AMT that expired at the end of 2008. The effects of that alternative are shown separately.

g. This alternative incorporates the assumption that the exemption amount for the AMT (which was increased through 2008 in P.L. 110-343) is extended at its higher level and, together with the AMT tax brackets, is indexed for inflation after 2008. In addition, the treatment of personal credits against the AMT (which was also extended through the end of 2008) 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 $635 billion (plus $126 billion in debt-service costs).

In subsequent years, the annual funding required for military operations in Iraq and Afghanistan or in other locations may eventually be less than the amounts in the baseline if the number of troops and 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, Afghanistan, and elsewhere in support of the war on terrorism. (Many other outcomes—some costing more and some less—are also possible.) Under both scenarios, reductions in force levels in Iraq beginning in 2009 are partially offset by a temporary increase in forces deployed to Afghanistan. As a result, the number of deployed troops declines from an average of 210,000 in 2008 but, under the two scenarios, at different rates and to different sustained levels. The amount of spending for the support of indigenous security forces in Iraq and Afghanistan and for diplomatic operations and foreign aid is the same under both scenarios.

Under the first scenario, troop levels would be rapidly reduced over a two-year period; deployed forces decline to an average of roughly 180,000 in 2009 and 90,000 in 2010, until 30,000 military personnel remained overseas in support of the war on terrorism at the start of 2011. That number of deployed troops would be sustained through 2019, although not necessarily in Iraq and Afghanistan. Under such a scenario, discretionary outlays for 2009 would be about $24 billion higher than the amount in the baseline, but annual outlays would be lower beginning in 2012. In total, over the 2010–2019 period, discretionary outlays would be $281 billion less than the amount recorded in the current baseline.

Under the second scenario, the number of troops would decline more gradually over a four-year period, dropping to an average of about 190,000 in both 2009 and 2010, then to 150,000 in 2011, and falling steadily throughout 2012, until 75,000 remained overseas by 2013 and each year thereafter. Under such a scenario, discretionary outlays for 2009 would increase by $26 billion compared with the amount in the current baseline, but annual outlays would fall slightly below the amounts projected beginning in 2016. During the 2010–2019 period, total outlays for activities related to the war on terrorism would exceed the amount reflected in the baseline by about $165 billion.

Other Discretionary Spending. There are many possible alternative assumptions 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 $1.5 trillion higher than the amount in the current baseline. In contrast, if lawmakers did not increase appropriations after 2009 to account for inflation, cumulative discretionary outlays would be $1.2 trillion lower. Under that latter scenario (sometimes referred to as a "freeze" in appropriations), total discretionary spending would fall from 8.0 percent of GDP in 2008 to 5.1 percent in 2019.

Revenues. The baseline assumes that the major provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003—such as the introduction of the 10 percent tax bracket, increases in the child tax credit, the repeal of the estate tax, and lower rates on capital gains and dividends—will expire as scheduled at the end of 2010. On balance, the tax provisions that are set to expire during the 10-year projection period reduce revenues; thus, under a scenario in which they were extended, projected revenues would be lower than the amounts indicated in the current baseline. For example, if all expiring tax provisions (except those related to the amount of the exemption for the AMT) were extended, total revenues over the 2010–2019 period would be about $3.0 trillion lower than in the projection in the current baseline.[19]

Another change in policy that could affect revenues involves the modification of the AMT, which many observers believe will not be maintained in its current form. Because the AMT's exemption amount and brack-

19. That estimate reflects the fact that the effect of lowering the amount of taxpayers' regular tax liabilities would be partially offset by an increase in the number of taxpayers subject to the AMT. The estimate does not include any macroeconomic effects—unlike CBO's baseline projections, which incorporate the effects that the tax provisions' expiration would have on the economy. However, any macroeconomic effects are likely to be small relative to GDP. In addition, when this report went to press, the Joint Committee on Taxation's (JCT's) most recent estimates of the effects of extending expiring tax provisions were based on CBO's baseline projections from February 2008, updated for laws enacted through August 2008. Therefore, CBO has adjusted those estimates to take into account its updated economic projections and recent changes in law. JCT is currently updating its estimates to reflect CBO's new projections, and CBO will make those estimates available when they are completed.

ets are not indexed for inflation, the impact of the tax will grow in coming years as more taxpayers become subject to it. If the AMT was indexed for inflation after 2008 and no other changes were made to the tax code, federal revenues over the next 10 years would be about $0.6 trillion lower than the amount in the baseline.

Because the number of taxpayers who are subject to the AMT will depend on whether the tax provisions originally enacted in 2001 and 2003 remain in effect, the combination of indexing the AMT for inflation and extending the expiring provisions would reduce revenues by more than the sum of the effects of each policy enacted alone. The interactive effect would lower revenues by an additional $0.6 trillion between 2011 and 2019.

The Treatment of the Troubled Asset Relief Program in the Federal Budget

The TARP was created by the Emergency Economic Stabilization Act of 2008 in October 2008 to enable the Secretary of the Treasury to purchase or insure troubled assets. Under the legislation, the authority to enter into agreements to purchase such assets is set to expire on December 31, 2009, but can be extended until October 3, 2010, upon certification by the Secretary that the extension is necessary.

The purchase price of all assets outstanding at any one time cannot exceed $700 billion (though cumulative gross purchases could exceed $700 billion as previously purchased assets are sold). Currently, the Secretary has the authority to purchase $350 billion in assets; the remaining $350 billion will become available if the Administration requests it and the Congress does not take action to deny that request.

As of December 19 (when CBO finalized its baseline), the TARP had used $198 billion to purchase equity in 116 financial institutions (including $40 billion for AIG). Between December 19 and December 31, the Treasury purchased another $40 billion in equity from 100 more banks (including a second purchase from Citigroup) and disbursed $9 billion in loans to the automakers. The Treasury has also announced plans for the following additional actions:

- Purchase of $10 billion for equity in Merrill Lynch (upon completion of its acquisition by Bank of America);
- A guarantee of a pool of assets owned by Citigroup, at a cost of up to $5 billion;
- Credit protection against debtors that do not pay because of insolvency or protracted default as part of the Federal Reserve's Term Asset-Backed Securities Loan Facility, at a cost of up to $20 billion;
- Loans to General Motors and Chrysler of another $8.4 billion; and
- The purchase of $5 billion in equity from GMAC (a financial services company) and an agreement to lend up to an additional $1 billion to General Motors to help GMAC reorganize as a bank holding company.

The Treasury has indicated that it will use the remainder of the initial $350 billion for additional equity purchases in financial institutions.

The legislation that created the TARP requires that the federal budget display the costs of purchasing or insuring troubled assets using procedures similar to those specified in the Federal Credit Reform Act but adjusting for market risk (in a manner not reflected in that law). In particular, the federal budget should not record the gross cash disbursement for the purchase of a troubled asset (or cash receipt for its eventual sale) but instead should reflect an estimate of the government's net cost for the purchase. Broadly speaking, the net cost is the purchase cost minus the present value—calculated using an appropriate discount factor that reflects the riskiness of the asset—of any estimated future earnings from holding the asset and the proceeds from the eventual sale of the asset.

Following that directive, CBO has estimated the present value of the net costs of the TARP's activities, accounting for the specific actions taken before December 19. In its estimates, CBO assumed that the full $700 billion of available purchasing authority will eventually be used (by the end of calendar year 2009) and that future disbursements will have a subsidy rate similar to the average for the transactions that occurred until December 19 (about 25 percent). All told, CBO estimates that the subsidy costs related to the TARP's transactions will total more than $180 billion in 2009 and about $5 billion in 2010

(some transactions may not take place until the next fiscal year begins in October).[20]

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

On September 6, 2008, exercising authority provided under the Housing and Economic Recovery Act of 2008 (P.L. 110-289), the Director of the Federal Housing Finance Agency (FHFA) and the Secretary of the Treasury placed Fannie Mae and Freddie Mac into conservatorship and took an ownership interest in each company. The Treasury received ownership interest in the form of senior preferred stock 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 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 have been considered private firms owned by their shareholders. However, because of the extraordinary degree of management and financial control that the government has now exercised, CBO concludes that the entities should now be considered federal operations. Although the GSEs are not legally government agencies and their employees are not civil servants, CBO believes it is appropriate and useful to policymakers to account for and display the GSEs' financial transactions alongside all other federal activities in the budget.

That view is consistent with the principles expressed by the 1967 President's Commission on Budget Concepts, which asserted that "the federal budget should, as a general rule, be comprehensive of the full range of federal activities. Borderline agencies and transactions should be included in the budget unless there are exceptionally persuasive reasons for exclusion."[21] The commission suggested certain broad criteria to help make such determinations. For example, who owns an entity and selects the managers? Do the Congress and the President have control over an entity's program and budget, or are its policies set primarily in response to private owners and not to accomplish some broader public purpose? Clearly, Fannie Mae and Freddie Mac are currently controlled and operated by the federal government and heavily dependent on the government for their access to the credit markets.

CBO accounts for the GSEs' operations in the federal budget using the same procedure that it applies in valuing the Treasury's purchases under the TARP (that is, 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, including their operations on the budget would increase the federal deficit by nearly $240 billion in 2009 and by about $70 billion between 2010 and 2019.

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 guaranteed assets falls short of their liabilities by about $200 billion (on a present-value basis); that amount is included in CBO's estimate of the deficit calculated for 2009. Nearly $40 billion in 2009 and smaller annual amounts thereafter represent the estimated annual subsidy costs (on a net-present-value basis) associated with the GSEs' new business after the takeover. The combined subsidy rate for both GSEs' credit activities is estimated to be about 2.5 percent in 2009 and to decline to about 0.3 percent after 2014. The decline in the subsidy rate reflects CBO's forecast that housing and mortgage markets will stabilize over that period.

CBO has long held that the federal government has subsidized the operation of Fannie Mae and Freddie Mac by providing what some have called an "implicit guarantee" of the GSEs' debt.[22] However, the federal government has never recognized the cost of the subsidy in its budget. The value of that guarantee (the existence of which has now been explicitly demonstrated by the Treasury) is a large component of the estimated cost of the GSEs' operations that CBO has included in its baseline projections.

Because CBO considers the GSEs' activities part of the federal budget, the anticipated cash infusions from the

20. The Treasury thus far has recorded its purchases of equity in financial institutions on a cash basis.

21. President's Commission on Budget Concepts, *Report of the President's Commission on Budget Concepts* (October 1967).

22. See Congressional Budget Office, *Assessing the Public Costs and Benefits of Fannie Mae and Freddie Mac* (May 1996) and *Federal Subsidies and the Housing GSEs* (May 2001).

Table 8.

Changes in CBO's Baseline Projections of the Deficit Since September 2008

(Billions of dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total, 2009-2013	Total, 2009-2018
Total Deficit as Projected in September 2008	**-438**	**-431**	**-325**	**-126**	**-147**	**-170**	**-162**	**-207**	**-174**	**-135**	**-1,466**	**-2,313**
Changes to Revenue Projections												
Legislative	-104	-6	-3	-3	-1	-2	*	1	8	4	-118	-108
Economic	-106	-204	-242	-243	-216	-191	-187	-198	-212	-226	-1,010	-2,024
Technical	-152	-138	-108	-80	-48	-32	-24	-18	-15	-15	-527	-631
Total Revenue Changes	**-362**	**-348**	**-353**	**-327**	**-265**	**-226**	**-211**	**-215**	**-219**	**-237**	**-1,655**	**-2,763**
Changes to Outlay Projections												
Legislative												
Mandatory outlays												
TARP	184	5	*	*	*	*	*	*	*	*	189	189
Unemployment compensation	9	0	0	0	0	0	0	0	0	0	9	9
Other	5	2	1	2	*	*	*	*	1	-1	10	10
Subtotal, mandatory	198	7	1	2	*	*	*	*	1	-1	208	208
Discretionary outlays												
Defense	-22	-61	-88	-99	-105	-108	-111	-114	-116	-117	-375	-940
Nondefense	*	-6	-9	-12	-13	-14	-14	-14	-14	-14	-39	-109
Subtotal, discretionary	-22	-67	-97	-111	-118	-121	-124	-128	-130	-132	-414	-1,049
Net interest outlays (Debt service)	3	8	10	12	6	-3	-10	-19	-28	-47	39	-67
Total, legislative	**179**	**-51**	**-85**	**-98**	**-112**	**-124**	**-134**	**-146**	**-158**	**-180**	**-167**	**-909**
Economic												
Mandatory outlays												
Social Security	1	-10	-20	-25	-28	-30	-32	-35	-38	-42	-83	-260
Other COLA programs	*	-3	-7	-7	-8	-8	-8	-8	-8	-8	-25	-66
SNAP	5	11	14	15	12	10	8	6	4	2	57	86
Unemployment compensation	12	21	13	8	3	*	-1	-1	-1	-1	57	54
Medicare	-1	-2	-5	-6	-7	-10	-13	-14	-15	-15	-22	-89
Medicaid	2	4	3	*	-3	-6	-8	-9	-11	-12	4	-42
Earned income credit	*	-1	-4	-3	-3	-3	-2	-2	-2	-2	-12	-24
Oil and gas receipts[a]	6	7	8	8	8	8	8	8	8	8	37	77
Student loans	-5	-8	-7	-4	-1	*	*	*	*	*	-26	-27
Other	1	1	1	*	*	-1	-1	-2	-2	-3	3	-6
Subtotal, mandatory	20	19	-4	-15	-27	-40	-49	-58	-67	-75	-7	-296
Discretionary outlays	*	-1	-8	-13	-16	-18	-20	-20	-21	-22	-39	-140
Net interest outlays												
Debt service	*	2	5	13	24	32	40	48	56	65	44	286
Rate effect/inflation	-44	-79	-104	-81	-43	-28	-20	-14	-10	-8	-351	-431
Subtotal, net interest	-44	-78	-99	-67	-19	5	20	34	46	57	-307	-145
Total, economic	**-24**	**-60**	**-111**	**-96**	**-62**	**-53**	**-48**	**-45**	**-41**	**-40**	**-353**	**-580**

Continued

Table 8. **Continued**

Changes in CBO's Baseline Projections of the Deficit Since September 2008

(Billions of dollars)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total, 2009-2013	Total, 2009-2018
Changes to Outlay Projections (Continued)												
Technical												
Mandatory outlays												
Fannie Mae/Freddie Mac	218	15	14	8	6	3	4	4	4	4	261	279
Deposit insurance	24	27	4	-19	-17	-10	-3	-2	*	-1	19	3
Social Security	1	3	6	8	10	11	12	12	12	12	28	86
Medicare	5	-6	-10	-4	-9	-6	-6	-9	-10	-12	-23	-67
Medicaid	-3	-3	-2	-4	-6	-8	-10	-13	-16	-19	-18	-86
Spectrum auction	-17	1	*	0	0	0	0	0	0	0	-17	-17
Other	-10	4	8	-2	3	5	6	7	6	7	3	35
Subtotal, mandatory	217	42	19	-12	-13	-5	2	-2	-4	-10	253	233
Discretionary outlays	4	-2	-3	*	1	1	1	1	1	1	*	4
Net interest outlays												
Debt service	*	3	10	22	34	39	42	45	48	50	70	293
Other	8	-8	-9	-5	-2	-3	-1	-4	-5	-4	-16	-33
Subtotal, net interest	8	-5	1	17	32	36	41	41	43	46	54	261
Total, technical	**230**	**35**	**17**	**5**	**19**	**32**	**43**	**40**	**40**	**37**	**306**	**498**
Total Outlay Changes	**385**	**-76**	**-179**	**-189**	**-155**	**-146**	**-139**	**-151**	**-159**	**-183**	**-214**	**-991**
Total Impact on the Deficit[b]	**-748**	**-272**	**-174**	**-138**	**-110**	**-80**	**-72**	**-65**	**-60**	**-54**	**-1,442**	**-1,772**
Total Deficit as Projected in January 2009	**-1,186**	**-703**	**-498**	**-264**	**-257**	**-250**	**-234**	**-272**	**-234**	**-188**	**-2,908**	**-4,085**
Memorandum:[b]												
Total Legislative Changes	-283	45	82	95	110	122	134	147	166	183	49	801
Total Economic Changes	-82	-144	-131	-148	-153	-138	-139	-153	-171	-185	-658	-1,444
Total Technical Changes	-382	-173	-125	-85	-67	-64	-67	-58	-55	-52	-833	-1,129

Source: Congressional Budget Office.

Note: TARP = Troubled Asset Relief Program; COLA = cost-of-living adjustment; SNAP = Supplemental Nutrition Assistance Program; * = between -$500 and $500 million.

a. Receipts from leases for resource development on the Outer Continental Shelf.

b. Negative numbers indicate an increase in the deficit.

Treasury are essentially intragovernmental transfers that have no net effect on the budget. CBO estimates that such transfers will total nearly $18 billion in 2009 ($13.4 billion has already been provided by the Treasury to Freddie Mac) and close to $80 billion between 2010 and 2015.

Changes in the Budget Outlook Since September 2008

Economic conditions and policy actions have generated substantial changes to CBO's baseline since the previous one was published in September 2008.[23] Overall, CBO's estimate of the baseline deficit for 2009 has risen by nearly $750 billion; for the 2009–2018 period, projected deficits are about $1.8 trillion higher than previously estimated (see Table 8). Economic and technical revisions boost the cumulative deficit by $2.6 trillion over the 10-year period, but changes related to legislation diminish that figure by about $800 billion.

Economic Changes. Revisions attributable to changes in CBO's economic forecast since September have led to an average increase in the projected deficit of almost $145 billion a year. In the current baseline, projected revenues have been decreased by an average of $200 billion a year and outlays by nearly $60 billion annually.

Reflecting both lower real growth and lower inflation anticipated in the new economic assumptions, CBO has lowered its projections of nominal GDP and the components of taxable income, most importantly wages, salaries, and corporate profits. Those downward revisions were most significant for 2009 through 2011, but lower prices and lower nominal income continue through the end of the projection period. In sum, those changes caused CBO to reduce its projection of revenues by $106 billion in 2009, $204 billion in 2010, and a total of $2.0 trillion over the 2009–2018 period.

A portion of the drop in projected revenues has been offset on the outlay side of the budget. Economic factors have reduced projected outlays by $580 billion between 2009 and 2018. In the current baseline, substantially lower inflation for the next few years reduces the anticipated cost-of-living adjustments for Social Security and other benefit programs. (CBO anticipates that the year-over-year change in consumer prices for the third quarter of 2009 will show a decline, which implies that next year's cost-of-living adjustment for Social Security and most other benefit programs will be zero.) In addition, lower inflation diminishes the projected growth of discretionary spending in the baseline. CBO has also reduced its projections of net interest payments by $431 billion over the 10-year period because of its expectation of lower inflation and lower interest rates. However, some of that decrease is offset by additional projected borrowing costs as a result of lower estimated revenues.

The changed economic outlook affects projected outlays in a number of other ways. CBO now anticipates that the unemployment rate for the next few years will be higher (by as much as 3 percentage points) than it forecast in September, which boosts the projected costs of unemployment compensation and nutrition assistance by $54 billion and $86 billion, respectively, over the 10-year period.[24] Also, the decline in projected oil and gas prices reduces estimated receipts from federal leases on the Outer Continental Shelf by $77 billion between 2009 and 2018.

Legislative Changes. Since September, the effects of legislation have added about $280 billion to CBO's projection of the deficit for 2009 but reduced its estimate of the cumulative deficit by about $800 billion over the 10-year period. The largest effects in 2009 stem from the Emergency Economic Stabilization Act of 2008 and its creation of the TARP. On a net-present-value basis adjusted for market risk, outlays for the program will total more than $180 billion in 2009 and $5 billion in 2010, CBO estimates. That legislation also included some tax provisions, most notably, extending relief from the AMT for a year. Altogether, legislative changes have caused CBO to reduce its estimate of revenues in 2009 by $104 billion and have had little impact on projected revenues thereafter.

The Unemployment Compensation Extension Act of 2008 (P.L. 110-449), enacted in November 2008, provides additional unemployment compensation to individuals who exhaust their regular benefits before March 31, 2009. CBO estimates the additional compensation will increase outlays by $9 billion in 2009.

23. See Congressional Budget Office, *The Budget and Economic Outlook: An Update* (September 2008).

24. Over 10 years, the effect of higher unemployment compensation on the budget is largely offset by higher revenues. States are assumed to replenish their depleted trust fund balances by increasing unemployment taxes, which are recorded as federal revenues.

The timing of appropriation actions can have a significant impact on CBO's baseline projections. Because baseline projections of discretionary spending are derived from the most recent appropriations, CBO based its September projections on appropriations for 2008, which included $186 billion for military and diplomatic operations in Iraq and Afghanistan and other activities in the war on terrorism. To date, less than $70 billion has been provided for 2009 for such activities; the effect of extending that smaller amount of enacted appropriations (as well as other differences in the amounts appropriated last year and this year) has reduced projected discretionary outlays from 2009 to 2018 by more than $1 trillion from the amount estimated in September.[25]

Technical Changes. Factors not directly attributable to changes in CBO's economic forecast or legislation—that is, technical changes—have increased projected deficits for 2009 through 2018 by $1.1 trillion from the amounts projected in September. About 55 percent of those changes have occurred on the revenue side of the budget.

Changes in factors affecting the amount of revenue yielded by a given amount of GDP and its income components have caused CBO to lower its projection of revenues by $152 billion for 2009, $138 billion for 2010, and by more than $600 billion for the 2009–2018 period. Those technical factors are largely related to the current economic environment but are not specifically addressed in the economic forecast.

The recent decline in the stock market is the most important cause of the reduction in projected revenues attributable to technical factors. That change has caused CBO to significantly lower its projections of realizations of capital gains by individuals and corporations, distributions received by individuals from their tax-deferred retirement accounts, and the amount of wealth subject to the estate tax. To some extent, those downward adjustments persist throughout the 10-year projection period to reflect a permanently lower amount of wealth. Technical factors that are not related to the current economic environment, such as updates to certain models to reflect new research and data, have caused a relatively small change to the revenue outlook in the near term and have caused changes that offset some of the downward adjustments in the later part of the projection period.

For 2009 through 2018, CBO has increased its projection of outlays by $498 billion to reflect technical changes. The largest contributor to that figure is the agency's decision to include the operations of Fannie Mae and Freddie Mac as part of the federal budget; subsidy costs for those entities have added $279 billion to the baseline over the 10-year period. (In its previous baseline, which was developed before the takeover of the two GSEs, CBO had included $25 billion for potential payments to keep them solvent.)

Net outlays for deposit insurance are now projected to be about $19 billion higher over the next five years than the amount estimated in September because of an expected increase in the number of failed banks, thrifts, and credit unions. The net increase over the 10-year period is much smaller ($3 billion) because the near-term costs should eventually be offset by proceeds from the sale of liquidated assets and higher premiums for deposit insurance.

Projections for Social Security, Medicare, and Medicaid include relatively small technical adjustments based on changes in expected caseloads and other new information. CBO has raised its projection of Social Security outlays over the 2009–2018 period by $86 billion (or by 1 percent), nearly all of which is attributable to an increase in the number of beneficiaries participating in the Disability Insurance program; CBO has reduced its projections by similar amounts for Medicare (primarily because of lower-than-expected outlays in 2008 for prescription drugs under Part D of the program and for hospital inpatient and post-acute services under Part A) and Medicaid (largely because of lower-than-expected outlays in 2008).

CBO's current baseline includes receipts (negative outlays) of $17 billion in 2009 from auctions held in 2008 of licenses for the commercial use of radio frequencies that are currently used for television broadcasts. Those receipts were originally expected to be recorded last year but were delayed pending the issuance of the licenses.

Debt service on other technical changes and small adjustments to certain assumptions about the Treasury's borrowing have caused CBO to raise projected outlays for net interest between 2009 and 2018 by $261 billion.

25. If regular or supplemental appropriations are enacted in place of or in addition to the current continuing resolution, subsequent baseline projections will incorporate their effects.

The Long-Term Outlook

High deficits in the near term may be inevitable in the face of the financial crisis and severe economic weakness, However, once the nation gets past this downturn, it will still face 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 over time would probably constrain long-term economic growth by reducing national savings and investment, which in turn would cause productivity and wage growth to gradually slow.

The rate of growth of spending on health care is the single greatest threat to budget balance over the long run, and such spending will have to be controlled in order for the fiscal situation to be sustainable in future decades.[26] Together, outlays for Medicare and Medicaid (not including offsetting receipts) currently account for about 5 percent of GDP. Spending for those programs is expected to rise at a rapid pace over the next 10 years, outstripping the growth of GDP. By 2019, spending for those programs combined is projected to total about 6.3 percent of GDP. By 2050, it could reach 12 percent. Without changes to federal fiscal policy, those rising costs would drive the amount of debt held by the public significantly higher as a percentage of GDP than it is today.

26. In December 2008, CBO released two volumes that focus on health care issues: *Key Issues in Analyzing Major Health Insurance Proposals* and *Budget Options, Volume 1: Health Care*. Those reports, which build upon CBO's previous analytical work on health insurance and other issues in financing health care, are intended to assist the Congress as it contemplates possible changes—both large and small—to federal health programs and the nation's health insurance and health care systems.

APPENDIX

A

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 authorities 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 in recent months to provide more than $1 trillion in financial support to banks, corporations, money market funds, and other institutions (see Table A-1).

Activities of the Federal Reserve are not directly recorded in the federal budget. Rather, each year its net earnings—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—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. Losses are possible, however; for example, the Federal Reserve has already written down—by about $2 billion—the value of the assets it acquired in the takeover of Bear Stearns.

The Department of the Treasury

Most of the actions taken by the Treasury were authorized by recent legislation. At the end of July, 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 (FHFA) 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

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.

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.

the crisis in credit markets (see Table A-2). The first $350 billion is now available for obligation; the second $350 billion will become available if the Administration requests it and the Congress does not take action to deny that request.

As of December 31, the program had disbursed $238 billion to banks and other institutions in exchange for shares of preferred stock and warrants. (Preferred stock refers to 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; a warrant is a security that entitles the holder to buy stock of the company that issued it at a specified price.) The program will also finance up to $17.4 billion in loans for General Motors and Chrysler (the automakers have received $9 billion already) and $6 billion in assistance related to GMAC, a financial services company.

Funds have also been pledged for additional capital purchases. Furthermore, the TARP is responsible for $20 billion in credit protection (protection against debtors that do not pay because of insolvency or protracted default) for the Federal Reserve's Term Asset-Backed Securities Loan Facility (TALF) and $5 billion in credit protection for assets held by Citigroup. In total, the funds already disbursed and those committed but not yet disbursed are likely to consume all of the first $350 billion available under the TARP.

Spending for some programs conducted by the Treasury will be recorded in the budget on a discounted present-value basis rather than on a cash basis.[3] 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.

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 Federal Deposit Insurance Corporation (FDIC) temporarily raised the limit on insurance coverage—from $100,000 to $250,000—as a result of a provision in the Emergency Economic Stabilization Act of 2008. Through existing authority to reduce systemic risks to the economy, the FDIC 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 will also provide assistance to Citigroup using that existing authority (see Table A-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 of 2008, but HUD has also used existing authority to create the FHA Secure program.

FHFA, under authority granted by the Housing and Economic Recovery Act of 2008, placed Fannie Mae and Freddie Mac under conservatorship. In addition, FHFA is planning to use its existing authority to create a program to streamline the loan modification process.

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.

3. The Administration is accounting for capital purchases made under the TARP on a cash basis rather than the present-value basis that was specified in the Emergency Economic Stabilization Act of 2008. That treatment will show more outlays than under CBO's treatment for the TARP this year and then cash receipts in future years.

Table A-1.

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of December 31, 2008

(Billions of dollars)

Action	Funding: Committed to Date	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	94	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	450	600	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 $150 billion, although accepted bids for most recent auctions have been considerably smaller.
Takeover of Bear Stearns Backed assets to facilitate takeover of Bear Stearns by JP Morgan Chase	29	29	The Federal Reserve created Maiden Lane I, 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 $27 billion.

Continued

Table A-1. **Continued**

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of December 31, 2008

(Billions of dollars)

Action	Funding: Committed to Date	Funding: Potential[a]	Description
Support for AIG Acquired control of nearly 80 percent of the insurance company	83	113	The Federal Reserve agreed to loan AIG $60 billion and acquired control of nearly 80 percent of the company. 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	334	1,800	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 April 30, 2009.
Support for Money Market Mutual Funds			
Money Market Investor Funding Facility	0	540	The Money Market Investor Funding Facility (MMIFF) is designed to restore liquidity to money markets by purchasing certificates of deposit and commercial paper from money market mutual funds. The authority to purchase assets is in effect through April 30, 2009.
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility	24	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 April 30, 2009.

Continued

Table A-1. **Continued**

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of December 31, 2008

(Billions of dollars)

Action	Funding: Committed to Date	Funding: Potential[a]	Description
Support for Primary Dealers			
Term Securities Lending Facility and TSLF Options Program	172	200	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 17 financial institutions, known as primary dealers, that trade directly with the Federal Reserve. The TSLF Options Program (TOP) offers options on short-term TSLF loans that will 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	37	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 April 30, 2009.
Support for the Mortgage Market			
Purchases of the debt of the housing-related government-sponsored enterprises	15	100	The Federal Reserve will purchase up to $100 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.
Purchases of mortgage-backed securities	0	500	Over the next several quarters, the Federal Reserve will purchase up to $500 billion in mortgage-backed securities (MBSs) issued by GSEs and the Government National Mortgage Association (Ginnie Mae). The MBS purchases are expected to begin in early January.
Support for Consumer and Small Business Lending	0	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 (consumer and small business loans), 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 is expected to begin lending in February 2009; the authority expires on December 31, 2009.
Term Asset-Backed Securities Loan Facility			

Continued

Table A-1. **Continued**

Actions Taken by the Federal Reserve in Support of the Housing and Financial Markets as of December 31, 2008

(Billions of dollars)

Action	Funding: Committed to Date	Funding: Potential[a]	Description
Assistance to Citigroup	0	234	The Federal Reserve will 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.
Currency Swaps	At least 500	Unlimited	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.

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

Note: n.a. = not applicable.

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

Table A-2.

Actions Taken by the Treasury in Support of the Housing and Financial Markets as of December 31, 2008

(Billions of dollars)

Action	Disbursements To Date	Disbursements Potential[a]	Subsidy[b] (Credit basis)	Description
Troubled Asset Relief Program	247	700	64	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). The second $350 billion will become available if the Administration requests it and the Congress does not take action to deny that request. As of December 31, the program had disbursed $247 billion. The subsidy cost estimated by the Congressional Budget Office—about $64 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	0	12	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.
Purchases of Obligations and Securities Issued by Fannie Mae and Freddie Mac	71	Unlimited	-1	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 $71 billion of residential mortgage-backed securities (securities whose value is derived from an underlying pool of mortgages) had been purchased as of December 31, 2008. 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 A-2. **Continued**

Actions Taken by the Treasury in Support of the Housing and Financial Markets as of December 31, 2008

(Billions of dollars)

Action	Disbursements To Date	Disbursements Potential[a]	Subsidy[b] (Credit basis)	Description
Conservatorship for Fannie Mae and Freddie Mac	14	200	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.)
Temporary Guarantee Program for Money Market Funds	Unknown	3,000	n.a.	The Treasury will guarantee investors' shares as of September 19, 2008. The guarantee is in effect through April 30, 2009, but can be extended through September 18, 2009. Participating funds pay a fee of 1.5 or 2.2 basis points times the number of shares outstanding. (A basis point is one-hundredth of a percentage point.)
Supplemental Financing Program	259	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.

Table A-3.

Actions Taken by Other Agencies in Support of the Housing and Financial Markets as of December 31, 2008

(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 Emergency Economic Stabilization Act of 2008 (Division A of P.L. 110-343) temporarily raised the limit on deposit insurance through December 31, 2009. 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 June 30, 2009, and matures no later than June 30, 2012. Participating institutions pay fees based on the maturity of the debt. To date, the Federal Deposit Insurance Corporation (FDIC) has guaranteed $258 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, which could total $450 billion.
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 will receive $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).
Department of Housing and Urban Development			
Redevelopment of Abandoned and Foreclosed Homes	0	4	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.
HOPE for Homeowners Program	0	1	The HOPE for Homeowners program permits home mortgages to be refinanced through private lenders with a guarantee from the Federal Housing Administration. The new loans must have a loan-to-value ratio that is no greater than 90 percent of the property's appraised value.

Continued

Table A-3. **Continued**

Actions Taken by Other Agencies in Support of the Housing and Financial Markets as of December 31, 2008

(Billions of dollars)

Action	Disbursements To Date	Disbursements Potential[a]	Description
Department of Housing and Urban Development (Continued)			
FHA Secure	n.a.	1	FHA Secure was a temporary initiative to permit lenders to refinance non-FHA (Federal Housing Administration) adjustable-rate mortgages. The program has made about 4,000 loans since fall 2007 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.
Streamlined Modification Program	Unknown	Unknown	The Streamlined Modification Program is intended to avoid foreclosures by creating a fast-track method for reducing monthly payments on mortgages. The program will restrict payments to 38 percent of a household's gross monthly income by reducing the interest rate, extending the life of the loan, or deferring principal. That policy applies to loans held by Fannie Mae and Freddie Mac and was launched on December 15, 2008.
National Credit Union Administration			
Credit Union Homeowners Affordability Relief Program and Credit Union System Investment Program	0	41	These two loan programs are operated through the National Credit Union Administration's Central Liquidity Facility and are financed by borrowing from the Federal Financing Bank. The Credit Union Homeowners Affordability Relief Program (CU HARP) will provide subsidized funding intended to help credit unions modify mortgages. The Credit Union System Investment Program (CU SIP) seeks to facilitate lending by shoring up corporate credit unions (which primarily provide financial resources and services to other credit unions).
Temporary Corporate Credit Union Liquidity Guarantee Program	1	Unknown	The Temporary Corporate Credit Union Liquidity Guarantee Program guarantees certain unsecured debt of participating corporate credit unions that was or will be issued between October 16, 2008, and June 30, 2009. Such debt must mature by June 30, 2012. Participating institutions pay annualized fees for the guarantees.

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.

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

APPENDIX

B

CBO's Economic Projections for 2009 to 2019

The tables in this appendix expand on the information in the body of the report by showing the Congressional Budget Office's (CBO's) year-by-year economic projections for 2009 to 2019 (by calendar year in Table B-1 and by fiscal year in Table B-2). CBO does not forecast cyclical fluctuations in its projections for years after 2010. Instead, the projected values shown in the tables for 2011 to 2019 reflect CBO's assessment of average values for that period. That assessment takes into account economic and demographic trends but does not attempt to forecast the frequency and size of ups and downs in the business cycle.

Table B-1.

CBO's Year-by-Year Forecast and Projections for Calendar Years 2009 to 2019

	Estimated	Forecast		Projected								
	2008[a]	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nominal GDP (Billions of dollars)	14,304	14,241	14,591	15,347	16,293	17,280	18,211	19,077	19,909	20,749	21,617	22,500
Nominal GDP (Percentage change)	3.6	-0.4	2.5	5.2	6.2	6.1	5.4	4.8	4.4	4.2	4.2	4.1
Real GDP (Percentage change)	1.2	-2.2	1.5	4.2	4.4	4.1	3.5	2.8	2.5	2.3	2.2	2.2
GDP Price Index (Percentage change)	2.4	1.8	0.9	1.0	1.7	1.8	1.8	1.9	1.9	1.9	1.9	1.9
PCE Price Index[b] (Percentage change)	3.3	0.6	1.3	1.3	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Core PCE Price Index[c] (Percentage change)	2.2	1.5	0.9	1.2	1.7	1.9	1.9	1.9	1.9	1.9	1.9	2.0
Consumer Price Index[d] (Percentage change)	4.1	0.1	1.7	1.8	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Core Consumer Price Index[e] (Percentage change)	2.3	1.6	1.3	1.6	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Employment Cost Index[f] (Percentage change)	3.0	2.7	2.7	3.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Unemployment Rate (Percent)	5.7	8.3	9.0	8.0	6.8	5.8	5.1	4.9	4.8	4.8	4.8	4.8
Three-Month Treasury Bill Rate (Percent)	1.4	0.2	0.6	2.1	4.0	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Ten-Year Treasury Note Rate (Percent)	3.7	3.0	3.2	3.6	4.7	5.4	5.4	5.4	5.4	5.4	5.4	5.4
Tax Bases (Billions of dollars)												
Economic profits	1,533	1,384	1,413	1,559	1,715	1,856	1,952	2,001	2,041	2,084	2,139	2,187
Wages and salaries	6,548	6,551	6,740	7,011	7,472	7,920	8,344	8,742	9,127	9,517	9,916	10,324
Tax Bases (Percentage of GDP)												
Economic profits	10.7	9.7	9.7	10.2	10.5	10.7	10.7	10.5	10.3	10.0	9.9	9.7
Wages and salaries	45.8	46.0	46.2	45.7	45.9	45.8	45.8	45.8	45.8	45.9	45.9	45.9

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

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

a. Values as of December 10, 2008.

b. The personal consumption expenditure chained price index.

c. The personal consumption expenditure chained price index excluding prices for food and energy.

d. The consumer price index for all urban consumers.

e. The consumer price index for all urban consumers excluding prices for food and energy.

f. The employment cost index for wages and salaries of workers in private industry.

Table B-2.

CBO's Year-by-Year Forecast and Projections for Fiscal Years 2009 to 2019

	Actual	Forecast		Projected								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nominal GDP (Billions of dollars)	14,224	14,257	14,452	15,137	16,048	17,035	17,986	18,864	19,703	20,537	21,397	22,278
Nominal GDP (Percentage change)	4.3	0.2	1.4	4.7	6.0	6.1	5.6	4.9	4.4	4.2	4.2	4.1
Real GDP (Percentage change)	1.9	-1.9	0.4	3.8	4.4	4.2	3.7	3.0	2.5	2.3	2.2	2.2
GDP Price Index (Percentage change)	2.4	2.1	1.0	0.9	1.6	1.9	1.8	1.9	1.9	1.9	1.9	1.9
PCE Price Index[a] (Percentage change)	3.7	0.7	1.4	1.2	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Core PCE Price Index[b] (Percentage change)	2.3	1.7	1.0	1.1	1.6	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Consumer Price Index[c] (Percentage change)	4.4	0.5	1.4	1.8	1.9	2.2	2.3	2.2	2.2	2.2	2.2	2.2
Core Consumer Price Index[d] (Percentage change)	2.4	1.8	1.4	1.5	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Employment Cost Index[e] (Percentage change)	3.1	2.7	2.6	2.9	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Unemployment Rate (Percent)	5.3	7.7	9.1	8.3	7.1	6.0	5.3	4.9	4.8	4.8	4.8	4.8
Three-Month Treasury Bill Rate (Percent)	2.1	0.2	0.4	1.6	3.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Ten-Year Treasury Note Rate (Percent)	3.9	3.1	3.1	3.5	4.4	5.3	5.4	5.4	5.4	5.4	5.4	5.4
Tax Bases (Billions of dollars)												
Economic profits	1,564	1,413	1,390	1,521	1,677	1,823	1,933	1,991	2,032	2,071	2,125	2,176
Wages and salaries	6,522	6,549	6,649	6,950	7,360	7,808	8,241	8,644	9,031	9,419	9,815	10,221
Tax Bases (Percentage of GDP)												
Economic profits	11.0	9.9	9.6	10.0	10.4	10.7	10.7	10.6	10.3	10.1	9.9	9.8
Wages and salaries	45.8	45.9	46.0	45.9	45.9	45.8	45.8	45.8	45.8	45.9	45.9	45.9

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

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

a. The personal consumption expenditure chained price index.

b. The personal consumption expenditure chained price index excluding prices for food and energy.

c. The consumer price index for all urban consumers.

d. The consumer price index for all urban consumers excluding prices for food and energy.

e. The employment cost index for wages and salaries of workers in private industry.

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	Individual income taxes
Paul Burnham	Retirement income
Grant Driessen	Excise taxes
Barbara Edwards	Social insurance taxes, Federal Reserve System earnings
Zachary Epstein	Customs duties, miscellaneous receipts
Pamela Greene	Corporate income taxes, estate and gift taxes, excise 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
David Weiner	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
Sunita D'Monte	International affairs, veterans' health care
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 and the war on terrorism), 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

Tom Bradley	Unit Chief
Stephanie Cameron	Medicare, Public Health Service
Mindy Cohen	Medicare, Public Health Service
Holly Harvey	Medicare
Jean Hearne	Medicare
Lori Housman	Medicare
Jamease Kowalczyk	Medicare, Public Health Service
Lara Robillard	Medicare, Public Health Service

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
Jessica Sherry	Low Income Home Energy Assistance Program, refugee assistance, Pension Benefit Guaranty Corporation

Low-Income Health Programs and Prescription Drugs

Kate Massey	Unit Chief
Julia Christensen	Food and Drug Administration, prescription drug issues
Sean Dunbar	Medicaid, State Children's Health Insurance Program, Public Health Service
Kirstin Nelson	Medicaid, Federal Employees Health Benefits program, Public Health Service
Andrea Noda	Medicare Part D, prescription drug issues, Public Health Service
Lisa Ramirez-Branum	Medicaid, prescription drug issues
Robert Stewart	Medicaid, State 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	Science and space exploration, Bureau of Indian Affairs, justice
Megan Carroll	Energy, conservation and land management, air transportation
Mark Grabowicz	Justice, Postal Service
Kathleen Gramp	Deposit insurance, energy, Outer Continental Shelf receipts, spectrum auction receipts
Greg Hitz	Agriculture
Daniel Hoople	Community and regional development, Federal Emergency Management Agency
David Hull	Agriculture
Tyler Kruzich	Water resources, conservation and land management
James Langley	Agriculture
Susanne Mehlman	Pollution control and abatement, Federal Housing Administration and other housing credit programs, including Fannie Mae and Freddie Mac
Matthew Pickford	General government
Sarah Puro	Highways, Amtrak, mass transit
Deborah Reis	Recreation, water transportation, legislative branch, conservation and land management, other natural resources
Aurora Swanson	Housing finance
Susan Willie	Commerce, Small Business Administration, Universal Service Fund

Other

Janet Airis	Unit Chief, Scorekeeping; legislative branch appropriation bill
Jeffrey Holland	Unit Chief, Projections
Edward Blau	Authorization bills

Other (Continued)

Barry Blom	Federal pay, monthly Treasury data, report coordinator
Jared Brewster	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
Damien Moore	Fannie Mae and Freddie Mac
Virginia Myers	Appropriation bills (Commerce–Justice, financial services, general government)
Jennifer Reynolds	Appropriation bills (Agriculture, foreign relations)
Mark Sanford	Appropriation bills (Defense, Homeland Security)
Eric Schatten	Interest on the public debt, Troubled Asset Relief Program, report coordinator
Phan Siris	Computer support
Esther Steinbock	Appropriation bills (Transportation–Housing and Urban Development, military construction and veterans' affairs, energy and water)
David Torregrosa	Fannie Mae and Freddie Mac
Patrice Watson	Database system administrator
Steve Weinberg	Fannie Mae and Freddie Mac